Lectures
ON
AFFECTIONS OF THE EYE IN RELATION TO MEDICINE AND SURGERY.

Delivered at the Harveian Society,

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LECTURE I.

(*Concluded from page 896.*)

BEFORE referring to the treatment of purulent ophthalmia, when it is fully established, it will be interesting to inquire whether any prophylactic measures can be adopted either in regard to the mother or to the child, by which the occurrence of the disease may be prevented. Several essays have been made in this direction during the last few years, and amongst these the experiments of Crédé with antiseptics have been the most promising. It would, indeed, have been surprising if the antiseptic method had not been applied in this affection, for it is one in which the importance of destroying, or at least of rendering innocuous, the poisonous agent is more than usually obvious. Crédé remarks, in a short communication made in 1881 to the *Archiv für Gynæcologie*, that whilst the disease is rare in the upper classes, and only occurs with moderate frequency amongst the lower classes, it is the scourge and plague of lying-in institutions. Entertaining no doubt that it proceeds from inoculation of the eyes of the child with the secretions of the mother during delivery, he regards many, if not all, of the cases of vaginal catarrh and inflammatory conditions as depending on gonorrhœal infection, the poison of which has long ceased to produce gonorrhœal symptoms, though still capable of exciting purulent ophthalmia. He holds it to be impossible, from the excellence of the arrangements in the hospital, that one child could infect another, or even that the mothers could infect the children after birth, since the infants are under the charge of nurses, who only allow them to be suckled by their parent, and then immediately remove them. The disease was very prevalent, and in order to diminish the numbers, he directed that all the mothers who suffered from gonorrhœa or chronic vaginal catarrh should, for some time before delivery, repeatedly, and during delivery every half-hour, be washed out with a solution of carbolic or of salicylic acid containing 2 per cent. of the acid. This reduced the number of cases of purulent ophthalmia, but did not by any means abolish them. He then tried the cleansing of every child's eye with a solution of borax containing one part in sixty. This proving ineffective, he used one grain of nitrate of silver in forty of water, which was injected into the eyes soon after birth, and after they had been carefully washed with a 2 per cent. solution of salicylic acid. Finally, he came to the conclusion that it was unnecessary to employ the frequent vaginal douches to the mother, and that it was sufficient to attend to the eyes of the infant exclusively. He has of late pursued the following plan with the best results. Immediately after birth, a drop of a solution of nitrate of silver, containing one part of the salt in fifty of distilled water, is dropped into each eye, and the closed lids are then covered with a pledget dipped in a 2 per cent. solution of salicylic acid. The subjoined table shows the effects of this plan.

Year.	Births.	Infants affected.	Per cent.
1874	323	45	13·6
1875	257	37	12·9
1876	367	29	9·1
1877	360	30	8·3
1878	353	35	9·8
1879	389	36	9·2
1880 (up to May 31) ...	187	14	7·6
1881 (from June 1 to Dec. 8)	200	1	0·5

The last case was one in which the instillation of the nitrate was omitted.

Crédé's paper called forth two communications. One of these is by Abegg,[1] who states that he has been accustomed to wash out the eyes of all new-born infants with water only, with the result that out of 2266 births from 1871 to 1880 he had only 66 cases of purulent ophthalmia, or about 3 per cent. The other communication is by Olshausen, who recommends washing out the eyes thoroughly with a 2 per cent. solution of salicylic acid, since the ordinary nurses and midwives are not to be trusted with solutions of nitrate of silver. Still more recently, Crédé[2] has adopted with signal success a simpler plan of treatment—namely, the instillation of a single drop of a 2 per cent. solution of lunar caustic between the slightly separated lids. Of 300 children thus treated, no instance of purulent ophthalmia occurred, even of the mildest type, and no injurious effects followed the instillation of the drop in any case. The mothers were in many instances affected with syphilitic, gonorrhœal, and leucorrhœal disease. He believes that no other of the antiseptic remedies is so safe, so easy, and so innocent as this. It seems to me to be certainly worthy of general trial. Crédé's first suggestion has been adopted in this country by Dr. Grossmann in the Liverpool workhouses, with very satisfactory results; but in a letter which Dr. Grossman was good enough to write to me, in reply to an inquiry on my part as to whether he had continued the plan since his paper appeared in THE LANCET, he says that in one of the workhouses the house-surgeon now always applies iodoform, which he finds answers very well. Grossmann dusts the fine powder over the everted lids once in twenty-four hours, but finds that it is more easily applied in solution by the nurses.[3] Dr. Grossmann was kind enough to give me references to two German papers recently published. One is by Dr. Felsenreich[4] of Vienna, in which he gives the experience obtained at the Maternity Charity connected with the University under the charge of Dr. Braun. In this hospital 3000 children were subjected to Prof. Crédé's last method—namely, the instillation of a 2 per cent. solution of nitrate of silver, with the result that 56 only were affected with conjunctival blennorrhœa, which is equivalent to 1·93 per cent. Königstein[5] of Vienna also bears approving testimony to the method.

In employing antiseptics in the treatment of diseases of the eye it is well to be sure that we do no harm with our remedies, and in this respect the observations of Strassen[6] are deserving of special mention. His experiments were made with rabbits, and he found that very dilute solutions of carbolic, salicylic, and sulphurous acids, permanganate of potash and thymol proved strong irritants. On the other hand, quinine in 1 per cent. solution, chlorine water and pyrogallol in 3 per cent. solution, boric acid in 4 per cent. solution, and benzoate of soda in the proportion of one part to 500, were all comparatively unirritating. In regard to their relative antiseptic power, boric acid and pyrogallol seemed to be the most active.

But in the event of the disease not coming under the cognisance of the surgeon until suppuration is already freely established, what is then to be done? The conditions to be dreaded in these cases are ulceration proceeding to perforation of the cornea followed by prolapse of the iris and sloughing of the cornea. Speaking broadly—though of course there are many exceptions to the statement,—I consider that if the case be brought under the notice of the surgeon who knows what to do, in the course of the first week the disease can generally be cured. If he do not see it till the close of the second week, the cornea is generally involved, and ulceration with prolapse of the iris often occurs; if the third week has elapsed, the eye is often completely lost. If the disease have begun on the second day after delivery, it indicates a severe attack; if not till the fourth or fifth day, it has probably been infected after birth. The progress is in some cases very rapid and alarming, considerable chemosis occurs, an ulcer quickly forms and runs round the margin of the cornea, and the whole cornea assumes the aspect of wash-leather. In other cases again, though tolerably free discharge has taken place, the cornea still looks bright and clear after three weeks, but the rule is as I have stated above.

For many years a very simple apparatus was in use at the Westminster Ophthalmic Hospital which obviates the necessity of using syringes, sponges, cotton-wool, tow, or other

[1] Archiv f. Gynæcol., 1881, p. 502. [2] Ibid., B. xviii., 1881, p. 367.
[3] Grossmann: Ophth. Rev., April, 1882. [4] Archiv f. Gynæcol., xix., iii.
[5] Königstein: Archiv f. Kinderheilk., B. iii., Fas. 9 and 10.
[6] An. d'Ocul., 1881, p. 88.

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means of removing the purulent secretion. It consists of a tin canister holding about half a gallon of pure spring water, which is placed upon a bracket about six feet from the ground; a small tube projects from the lower part, to which a piece of india-rubber tubing is attached; the other end of the tube is connected with a conical piece of brass, guarded by a stopcock. The water may be medicated with one or other of the antiseptic substances. The child should be swathed in a thick towel, so that it may not raise its arms and incommode the operator or get wet, and be held in the arms of the nurse with the head inclined to one side, and a little depending. On turning the stopcock a jet of any required force may be directed against the eye, which may be regulated by raising the canister as well as by the stopcock. The current should be gentle at first, and made to play on the outside of the lids, which, however firmly glued together by the inspissation of the pus, soon open under its influence. The upper lid may then be raised and the stream so directed as to cleanse thoroughly the sinuses of the conjunctiva. A very little instruction is required to teach the nurse how to use the apparatus, and it may be employed two or three times a day. Two cautions require to be given in respect to it—first, that the current should be as gentle as possible until it can be seen whether the cornea is implicated or not. If this is bright and polished, it may be washed with more force; but if it is seen, when the lid is raised, to have lost its epithelium, and still more if there is deep ulceration, the greatest care should be exercised, for the prospects of the child differ immensely according to whether perforation of the cornea takes place or not. If perforation occur, and the aqueous humour escape, adherent leucoma, with displacement of the pupil, and considerable impairment of vision, are the least evils that can befall the patient, whilst too often fistula of the cornea, cataract, and atrophy of the globe are the results. On the other hand, if perforation can be prevented, the eye may escape with only a nebula, or, at most, a leucoma. It is well, in most instances, when the lid is much swollen, to determine the condition of the cornea by the use of the elevator, either with or without chloroform. The second caution is that if the little stopcock be too suddenly opened, and the stream allowed to escape with much force, some of the fluid now charged with pus is apt to rebound, and enter the eye of the nurse, who is then speedily made aware of the poisonous nature of the secretion. The effect of cold water on part of an abundant purulent secretion is to cause its coagulation; and it will often be found after the eye has been to all appearance thoroughly cleansed, and all the pus removed, that if the upper lid be everted a long stringy mass presents itself, which often occupies the conjunctival fold. This may be removed with forceps, or with a piece of clean wet wool, and leaves a clean, not ulcerated or bleeding, surface behind it. This roll often forms the nidus of the virus, and promotes continued suppuration. In washing the eye, and, indeed, at other times as well, it is expedient to protect the other eye, supposing it to be as yet free from disease, with a pad of cotton-wool, or, if this is resented, with a watch-glass, the edges of which may be made to rest on a circular fold of cotton-wool around the eye, and kept in position with a strip or two of diachylon plaster. A plate of mica has been recommended by Dr. Howe with the same object in view. It is not necessary to keep the eye protected in this way for more than a few days; for it seems to be pretty well ascertained that the virulence of the contagium is greatest when the discharge is at its height, and that it is less marked at the commencement and during the decline of the disease. All bandages therefore should be removed when the discharge grows thin.

In some instances the permanent application of cold will be found to be both pleasant and serviceable, and a convenient mode of applying cold is by means of a little irrigator, which is frequently employed at St. Bartholomew's Hospital. It consists of a small bag or sac of caoutchouc, each extremity of which is connected with a long piece of narrow indiarubber tubing. The sac is laid on the patient's eye. One end of the tubing is placed in water, which may be cooled to any desired extent by the addition of ice and what is contained in a vessel placed at a little distance above the head of the patient; the other end is allowed to hang over the bed into a footpan. The tube acts as a syphon, and the rapidity of flow through it can easily be regulated by a pair of bulldog forceps. The only objection to this apparatus is its weight; but if this can be borne, it materially reduces the activity of the pus-forming membrane. If the caoutchouc bag cannot be obtained, it may be replaced by a pig's bladder, to which two pieces of tobacco pipe with some indiarubber tubing are attached.

The employment of caustics differs much in the hands of different surgeons, some strongly recommending, others as strongly condemning, them. Perhaps there is something in the way in which they are applied. De Wecker and Landolt in their authoritative treatise remark that De Gräfe was one of the first to introduce a rational treatment of purulent conjunctivitis by the intelligent and appropriate treatment of caustics, but the right time must be chosen. It is not sufficient to drop in a strong solution for its action, if the secretion is abundant, and there is a risk that the cells of the surface of the cornea may be injured and complications on the side of this membrane favoured. Hence if this membrane be affected at all, cauterisation of every kind should be abstained from. The mode they recommend is to cauterise the palpebral conjunctiva and that of the sinus alone. They employ by preference the solid mitigated nitrate, consisting of one-third of nitrate of silver fused with two-thirds of potash nitrate, though lately they have thought that corneal troubles were sometimes referable to this method, however cautiously performed, and have resorted to the use of a 2 per cent. solution of the silver nitrate. If the solid mitigated nitrate be used, a brush dipped in a solution of common salt should be at hand and applied to the lid, with the view of neutralising any excess of the nitrate, and the lids should then be freely washed with pure cold or cool water. In ten or fifteen minutes the eschar begins to separate, and becomes quite detached in the course of an hour. The lid in the meanwhile becomes hot and painful, and there is much lacrymation. A period of remission follows, succeeded by one of recrudescence, when the cauterisation may be repeated.

Various other remedies have been recommended of late years to arrest the discharge. Thus M. Planchet[7] has recommended the employment of ergotine as a topical remedy. He employs it in the proportion of one part of ergotine to twenty parts of glycerine or of rosewater, and instils one drop every two hours, whilst a compress wetted with the fluid is applied externally. The action of ergot as a stimulant of the vaso-motor system of nerves, and of the unstriated muscular tissue, is well known, and its action may here be prompt and effective on account of the superficial position of the vessels. Haltenhoff and De Wecker, again, have drawn attention to the value of eserine sulphate as an antipyogenic remedy, which might be expected to act in the same manner as ergotine. Haab recommends solutions of resorcin, which he applies directly to the conjunctiva with a brush, in a two, three, five, or even ten per cent. solution. He at the same time endeavours to reduce the inflammation by the steady and persevering use of ice. Tannic acid and glycerine have also been suggested.

The plan of snipping the chemosed conjunctiva for the purpose of allowing the escape of the serum effused into the connective tissue is sometimes practised, but I cannot say that it has, in my experience, proved very useful, and I think it has the disadvantage of complicating an already sufficiently serious disease. There can be no serious pressure on the vessels on account of the great extensibility of the conjunctiva, and a wound of the surface may permit the entrance into the lymphatics and vessels of poisonous materials that might otherwise remain on the outside of the body. Still, if the cornea be deeply buried, and the chemosed conjunctiva protruded far between the lids, and threatened to become dry and scabby, I should not object to incise it; but care should be taken in all instances not to excise any of the membrane. An analogous proceeding, having the same object in view, the relief of the chemosed conjunctiva and engorged vessels of the eye, has been recommended by several authors—viz., to make a deep incision from the external canthus towards the external ear.

I must not omit, in conclusion, to refer to the plan recently suggested and warmly recommended by Mr. Bader which consists in injecting beneath the eyelids with a specially constructed syringe about two drachms of an ointment composed of one ounce of vaseline with one grain of atropine sulphate and one grain of red or binoxide of mercury. Mr. Bader claims that this reduces the amount of discharge, and acts very favourably even in cases where the cornea is implicated. Some further evidence of its utility is required, though the cases he has recorded responded well to its action and it gives no pain. It does not appear to be very easy to apply except by skilled hands.

[7] Journ. de Thérapeutique, 1878-79.

Lectures
ON
PHTHISIS.

Delivered at Charing Cross Hospital,

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LECTURE IV.

Further consideration of the lung lesion.—Extent and distribution of the pulmonary consolidation.—Quiescence and activity of the phthisical process.—Physical signs indicative of quiescence and activity.—Symptoms indicative of quiescence and activity; pyrexia; digestion and assimilation; loss of weight; cough; expectoration; hæmoptysis.—Symptoms of phthisis.—Other elements of prognostic value; inherited predisposition; constitutional condition; age.

GENTLEMEN,—In our consideration of the clinical varieties of phthisis we have seen the necessity of taking into account both the lung lesion and the symptoms which accompany it. Last time we were occupied in discussing the lung lesion with reference to: (1) Its characters and the secondary changes it underwent. We have now to consider it with reference to: (2) its extent and distribution; and (3) its quiescent or progressive nature.

2. *The Extent and Distribution of the Pulmonary Consolidation.*—It is necessary to consider both the extent of lung involved and the distribution of the consolidation. With regard to the former it is only needful to say that, *quoad* area of lung implicated, the more limited this is the better the prognosis. The distribution of the consolidation is also an element of much prognostic import. Speaking generally, it may be said that a massed is more favourable than a disseminated distribution of the lesion. The phthisical process at its commencement is usually confined to a single portion of the upper part of one lung. Physical signs, therefore, which indicate the existence of separate centres of consolidation in the same, or the implication of the opposite, lung, imply, for the most part, that the disease is progressing. This progressive tendency we are about to consider.

3. *The Quiescent or Progressive Nature of the Consolidation.*—The great characteristic of phthisical consolidation, as you will remember from our previous pathological considerations, is its tendency to spread, either by continuity or by the dissemination of the inflammatory products by vessels or bronchi, so that distant portions of the lung become involved. This infective property, although it varies in degree very considerably in different cases and under different circumstances, probably exists in all phthisical lesions, except in those old indurations which have become exclusively fibroid. Given therefore the existence of phthisis, even if the local process is not progressive at the time of observation, we anticipate the probability that it may sooner or later become so. The question, therefore, we have to consider is what signs and symptoms are indicative of the quiescence and activity of the lung lesion respectively. Our opinion on this head will be based upon a consideration of the results of physical examination of the chest and also of the symptoms of the disease.

Firstly, with regard to physical signs. Here I must ask ask you to bear in mind what we stated in the preceding lecture respecting the predominating characters of the pulmonary lesion, their physical diagnosis and clinical import. Remember the distinction between consolidations which consist almost exclusively of intra-alveolar products and those in which there is marked implication of the walls of the alveoli with increase of interlobular connective tissue; and note that the former only are capable of complete resolution. The physical signs which in a case of intra-alveolar consolidation are of favourable import are, as we have already stated, the gradual disappearance of the dry and moist crepitant râles, with diminution in the percussion dulness and in the deficiency of the respiration; those which indicate progress of the disease are the persistence of the crepitant râles and dulness, with, owing to the implication of the alveolar walls, the supervention of some shrinking of the lung. Speaking generally, it may be said that in all cases crepitant sounds are significant of activity of the disease. When softening of a consolidation is taking place, as indicated by the existence of the so-called moist crackling, it must be borne in mind that there is always a danger that the phthisical progress will involve adjacent or distant portions of the lung. With the completion of the softening process we carefully consider the cavity which is its outcome. The subject of cavity is so important that I propose to speak of it somewhat fully on a subsequent occasion. In its present connexion I would only remark that the most valuable information respecting its quiescent or progressive nature is to be derived from an examination of the immediately adjacent portions of the lung. The absence here of any crepitant râles or of other signs of progressive consolidation is favourable as indicating a tendency to fibroid limitation of the excavation. In the cavity itself the absence of moist râles with the existence of dry creaking sounds point to quiescence and tendency to contract.

All signs indicating spreading of the disease, whether by continuity or otherwise, are obviously of unfavourable import. This is, perhaps, especially the case where outlying portions of the lung become involved. Stethoscopic investigation beyond the area of primary disease is consequently of the utmost importance, and crepitation or other adventitious sounds here are carefully to be looked for. Lastly, signs of bronchial catarrh in portions of the lung not obviously consolidated, are always to be regarded with suspicion, inasmuch as such catarrh is frequently, but by no means invariably, accompanied by activity of the disease. Here, however, as in other points, we shall be guided largely by symptoms.

Symptoms are even more valuable than physical signs as evidence of the quiescence or activity of the phthisical process. Of these pyrexia is pre-eminently the most important, and its existence in the course of phthisis, in the absence of other causes, must be regarded as a certain sign of the activity of the disease. You will remember the two causes of fever in phthisis—the progressive implication of the lung, and the softening of the phthisical consolidation; and that the pyrexia due to the latter is much more remittent in its type than is that due to the former. A continued though more or less irregular fever is most characteristic of progressive consolidation and this is, therefore, of much graver import than is the purely remittent type which is met with principally during the softening of the more acute and localised lesions. Inasmuch, however, as consolidation and softening are so frequently associated, the pyrexia is most commonly the combined result of the two processes. These three charts well represent the differences of which I am speaking. You will not forget the frequency with which the febrile movement occurs in the early part of the afternoon, and subsides before eight or nine o'clock, the usual time for taking the evening temperature. Hence the importance of including the afternoon in our observations. The entire absence of fever certainly indicates the quiescence, though not necessarily, the complete inactivity, of the phthisical process.

Of other general symptoms, the processes of digestion and assimilation, the weight, and the pulse are also of value, as indications of the progress or the arrest of the disease. For the most part, however, they are so indirectly. Whatever impairs the general health favours the phthisical process, and whatever improves it tends to cause its arrest. Hence failure of digestion and assimilation is always of unfavourable import, and even if not at the time associated with activity of the disease, it is very likely soon to become so. Loss of weight has a similar significance. With regard to the pulse, it is only necessary to say that continued increase in its frequency, as being the result of a febrile process or of general weakness, points to progress.

The lung symptoms which are of value in this connexion are cough, expectoration, and hæmoptysis. The gradual disappearance of cough, except in the latest stages of the disease when the respiratory function is in abeyance, is obviously of favourable significance; but a continuance and even increase of this symptom is not necessarily of bad omen. Arrest of the phthisical process, with diminution of the catarrhal secretion, and a tendency to slight fibrosis and contraction, is very frequently attended by

increase of cough, which, owing to the absence of secretion, becomes more troublesome to the patient. This fact it is important to remember.

The significance of the sputa in phthisis varies according as it originates mainly in the bronchi, in softening consolidation, or in cavities. In cases of chronic phthisis with more or less bronchial dilatation, and also in cases of excavation, the expectoration of large quantities of mucopurulent material indicates a persistence of the catarrhal process, which if long continued is likely to lead to an increase in the pulmonary induration. In early phthisis also the sputa originate principally in the bronchi, and much expectoration usually indicates activity of the disease. During the process of softening the amount of expectoration varies according to whether or not there is a free communication between the softening masses and large bronchi. It may, therefore, be stated generally with regard to the expectoration in phthisis that diminution in amount is of favourable import, while the persistence of large quantities of sputa is indicative of more or less activity of the phthisical process.

Of hæmoptysis we shall have to speak on a future occasion. I would, however, remind you here that the prognostic value of this symptom is not the same in recent as in old lesions. In the former, the bleeding is usually capillary in its origin and its occurrence is usually associated with a certain amount of activity of the disease, the degree of which, as we shall see, is to be estimated by the thermometer. In old lesions, on the other hand, the blood more frequently originates from a small artery in a cavity, and although the immediate danger from the hæmoptysis is greater, there is, owing to the induration around, much less liability to the progressive implication of the lung.

This completes our consideration of the lung lesion. Of that other factor, the symptoms which accompany the disease, but little remains to be said, inasmuch as most of these have been already alluded to when speaking of the quiescence or activity of the phthisical process. You will, however, remember that symptoms are of the utmost importance; some of them, and especially those we have termed constitutional as distinct from lung symptoms, being in most cases of greater value than physical signs as evidence of the course of the disease. Pyrexia and marked impairment of digestion and assimilation are always unfavourable, and whilst they last are pretty sure indications of progress.

There remain three other circumstances which should always be taken into account in forming an opinion as to the probable course of phthisis: hereditary predisposition, constitutional state, and the age of the patient. The unfavourable influence of heredity is so marked and so universally recognised that its consideration need not now detain us. The offspring of phthisical parents inherit a constitutional feebleness which not only renders them abnormally liable to become phthisical, but probably also, in many cases, abnormally incapable of resisting injurious influences of other kinds, and thus their period of life tends to be shortened. This inherited weakness not infrequently impresses upon the individual physical peculiarities which enable us easily to recognise it—the small thorax, long eyelashes, and back covered with long downy hairs, with which you are all familiar. In those in whom inherited tendency is thus marked the course of phthisis is especially unfavourable.

The constitutional condition most favourable to the development of phthisis is, as you are aware, that inherited one to which we have just alluded. But in addition to this transmitted influence other conditions of constitution may be inherited or acquired which render the individual abnormally prone to become phthisical. It may be stated generally that all conditions of constitutional enfeeblement, whether due to impaired vitality of the parents, or the result of unfavourable hygienic surroundings or of disease after birth, favour the development and the progress of phthisis, and the existence of such constitutional weakness should not be lost sight of in making a prognosis.

With regard to age, early adult life is undoubtedly the period most favourable to phthisis. In middle and advanced life the disease is less prone to occur, and its course is usually more protracted.

THE new building of the Harvard Medical School has suffered considerable damage by fire, thus delaying the opening, which had been fixed for an early date.

TUBERCLE BACILLI IN THE URINE.

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THE following case has recently come under my observation, and is worthy of record.

A male patient, aged nineteen, who began to have symptoms of bladder disease at the age of fifteen, and for which he had been under frequent treatment ever since, was laid up early in February of this year with cystitis. I was asked to see him on the 25th of March, in consequence of other symptoms pointing to disease of the lungs. He had been wasting since Christmas, and now had a cough with high temperature, but at no time had hæmoptysis been observed. Mr. Greig Smith suspected there must be some commencing disease at the apices of the lungs, and found that the percussion note below the clavicles was not clear. A few days after this was remarked it was found that one of the rarer accidents of phthisis had occurred, and that there was subcutaneous emphysema across the upper part of the chest, and involving the loose cellular tissue of the neck. At the time of my visit, in consultation with Mr. Greig Smith, the patient was found to be much emaciated, with a hectic flush and a temperature (5.30 P.M.) of 103°. He had an occasional cough, but no expectoration. His principal complaint was a frequent desire to micturate, and pain in doing so; he could not go longer than two hours, and the passage always gave him acute pain. There was also occasional diarrhœa. On examining the chest there was the well-marked crackling of subcutaneous emphysema across the upper part of the thorax down to the third rib on both sides, and extending up the neck on both sides as high as the inferior maxilla and round to the occiput. The percussion note did not appear to be abnormal. The presence of air in the cellular tissue had altogether obscured the dulness of the percussion note which had been observed the day before. With the stethoscope coarse crepitation could be heard below and above both clavicles, as well as in all parts to which the air had extended. The presence of this emphysema crepitation quite obscured all other lung sounds; no bronchial breathing or bronchophony was present. The general condition of the patient, and the fact that emphysema had taken place, led to the conclusion that there was probably tuberculous disease in the lungs, but the hectic associated with the bladder symptoms appeared to be the predominating feature. On April 2nd I again saw the patient, and continued to see him each day till his death nine days later. There had been a very marked change since my first visit. The emphysema had entirely disappeared, and now it was evident that there was considerable disease in the upper lobes of both lungs; there was marked dulness on percussion from the clavicle to the third rib in front, and at the supraspinous fossæ behind; there was also coarse, bubbling crepitation, as of breaking-down lung, both in front and at the back of both upper lobes. There was frequent cough, but no expectoration; patient said he could not expectorate, but on being urged to try he coughed up and spat out on the handkerchief a plug of thick, yellow, tenacious, purulent matter, resembling the nummular sputum of phthisis, and which was found to contain immense numbers of tuberculous bacilli. The temperature was high, above 102°, and there was diarrhœa as often as five or six times in the day. The urine was copious, cloudy, with sediment of pus, but no casts, and only a trace of albumen; no blood.

It was now clear that the lung disease was of an active tuberculous character, and that this was the principal cause of the hectic and rapidly failing strength; but it occurred to me that it would be of some interest to examine the purulent urine for bacilli, as the cause of the disease in the bladder had been somewhat obscure, and had been suspected to be of a tuberculous nature. The only evidence of phthisis in the family was that his father died at forty-nine, after being ill for some years with what is called "bronchitis." On April 4th I obtained some of the urine for examination. It had a sediment of pus-corpuscles, amounting to about one-twentieth of the bulk of the urine, and about one-eighth of albumen; there was no trace of blood, and no casts or blood-corpuscles could be seen. On allowing a little of the sediment to dry on thin glass circles, and on treating them

exactly as sputum is treated in testing for bacilli by Ehrlich's method, with the aniline gentian fluid, I had no difficulty in detecting a few bacilli on each of the slides. They were not numerous, and although I had myself no doubt of their presence, I thought it might be difficult to convince a less easily satisfied observer. On the following day I obtained another specimen of urine with characters much as before. On searching for bacilli in the same manner, I again found unquestionable evidence of their presence on each of the thin glasses which I had prepared. I have now before me three mounted slides, each one of which contains an average of three or four tuberculous bacilli in any one field, readily seen with Hartnach, No. 7, and ocular 4. The largest number counted in one field is twelve, and in many parts of the slides none are visible; they are not therefore numerous, as in most specimens of tuberculous sputum, where they are seen at a glance in great numbers, but they have to be looked for with some care. Their appearance is exactly similar to the bacilli found in the sputum of the same patient: they are well formed, of full size, sporulated, and invariably isolated. One is found here and there, rarely two close together; no groups or masses are seen such as may be found in sputum—or better, in the caseous matter lining the cavities of lung. They have no connexion with the pus cells amongst which they are found. No putrefactive or other bacilli are visible on the slides, inasmuch as they were treated with nitric acid (1 to 2), and so everything has the blue colour redissolved from it except the bacilli; those therefore have the same appearance, dimensions, and chemical staining characters which are indicative of the bacilli of tubercle, and when treated in the same way the bacilli of the urine exactly resemble those of the sputum of the same patient. On April 6th the patient's strength was rapidly failing; he was delirious, and passed urine in the bed almost unconsciously; on one occasion about two ounces of almost pure pus was passed, with much straining and with a great deal of pain. This was put aside and carefully examined, but although a dozen slides were prepared in exactly the same manner as before, no one of them contained anything which could be certainly identified as a bacillus. The patient became more and more unconscious, and gradually weaker; there was no exacerbation of cough or dyspnœa, not much pyrexia, and no return of diarrhœa. The urine continued to flow freely in the bed at longer intervals, and was clearer than before. Death took place from gradual exhaustion, on April 11th, 1883. Post-mortem examination was not allowed.

This case is probably one of the first in which the occurrence of tuberculous bacilli has been observed in the urine, and it is to be regretted that the friends of the patient would not give their consent to such an examination as would clear up any doubt as to the original nature of the bladder disease. That the immediate cause of death was acute tubercular phthisis, superadded to the debility induced by protracted hectic from bladder disease, there can be no question. The surgeon who formerly attended the patient believed the case to be one of strumous, probably tuberculous, disease of the urinary organs, and the examination of the urine during the last week of life quite bears out this view. It may be said that the few bacilli found in the urine may have been introduced accidentally from the air of the apartment, or may have been expectorated. Neither view will bear criticism, inasmuch as there was no expectoration at any time, excepting when the patient was urged to cough for the purpose. The nurse and the mother of the patient deny the possibility of this latter view. Moreover, the urine was at once removed to the adjoining bath-room immediately after its passage. If the former hypothesis be adopted, it necessitates the existence of vast numbers of the bacilli in the air of the room in order that each drop might contain the numbers seen by the microscope. Doubtless the patient exhaled bacilli freely, as shown by Dr. Ransome to be the case with other phthisical patients; but the urine was not exposed to the air of the room for more than a few minutes, and the ordinary sediment in a medicine bottle of the urine could not contain such numbers as the few seen must imply. Furthermore, the urine passed on another occasion, that consisting of pure pus, did not contain bacilli, as it would be likely to do if those previously observed had been derived from the air in the room. It may accordingly be assumed that the bacilli found in the urine were discharged from the urinary passages. There were no symptoms and no evidences of any disease of the kidneys, but the whole history of the case in its early period was one of urethral and bladder mischief. It would be interesting to know whether at this period the urine contained tuberculous bacilli, but at this date Koch's great discovery had not been made. Probably the introduction accidentally or incidentally of the bacilli from without by means of the urethra may have been the first cause of the whole train of subsequent events. Tuberculous bacilli have been observed in the urine by Professor Rosenstein, of Leyden, in a patient whose symptoms had been of five years' duration,[1] and it is interesting to observe that in the case now reported the bladder symptoms had been of four years' duration before the lungs became implicated, the latter having preceded death by only four weeks. What the route was by which the lungs became infected we can only surmise. There is no evidence of any direct infection from communication with other patients, and it is probable that the source of infection was internal by means of blood and lymphatic vessels; the fact that the disease commenced in the apices of both lungs simultaneously quite bears out this view.

Clifton.

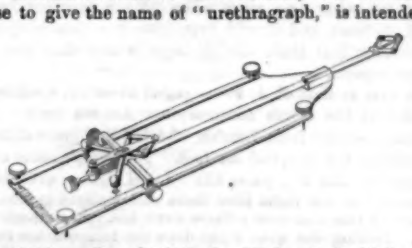
THE URETHRAGRAPH:

AN INSTRUMENT FOR OBTAINING A DIAGRAM OF THE CIRCUMFERENCE OF THE URETHRA.

BY GEORGE HERSCHELL, M.D. LOND.

EVERY surgeon who has much to do with cases of stricture of the urethra, and who habitually makes use of the urethrameter, must be fully alive to the time unavoidably wasted in attempting by its aid to gain a comprehensive idea of the dimensions of any length of the canal. To do this a series of measurements have to be taken at short distances apart, each measurement involving a separate process of screwing and unscrewing the instrument, and the results have to be pieced together by a kind of synthesis. This is likely to severely try the patience of both subject and operator.

The instrument which I have devised, and to which I propose to give the name of "urethragraph," is intended to



avoid all this, and to obtain in the simple act of withdrawing it from a urethra into which it has been passed, a graphic representation of the whole length of the canal in the form of two lines, more or less parallel, traced upon a strip of smoked paper, the distance between these lines representing the exact circumference of the urethra. The instrument consists of a straight cannula seven inches in length and the size of a No. 10 catheter, French scale, terminating at its distal extremity in two short arms jointed in the centre and hinged at one end to the cannula and at the other to each other. To the junction is attached a fine rod which runs through the entire length of the cannula. The other end of this rod is attached by a mechanical arrangement something after the fashion of lazy-tongs to two other arms hinged to the other extremity of the cannula, so that any movement of the arms at the distal end is immediately communicated to those at the proximal. The former, when in apposition, only measure the same as the shaft, but will expand to nearly 30 mm. in circumference. In a state of rest they are kept expanded by a weak spiral spring at the proximal extremity of the rod. The arms at the proximal extremity are perforated each at the end to receive a pin with a heavy head, which acts as the recording agent upon the smoked paper. The cannula carrying this mechanism at each end slides freely through a block at one end of a slip of brass whose edges are turned over so as to hold securely a strip of smoked paper, which is further secured by pins at the corners

[1] Vide THE LANCET, Feb. 24th, 1883, p. 333.

passing through holes in the metal. The arms of this instrument have been constructed of such a ratio that the distance between the recording points will be always equal to the circumference of the widest part of the expanding distal end. Such being in brief the construction, it remains to indicate the manner of its use.

First of all the cannula is drawn to its full length from the frame, a slip of smoked paper is inserted in the grooves, and fastened at one or more corners with the pins. The arms are now shut together and the instrument is passed as far as the bulb of the penis. Now holding the penis in the third and fourth fingers of the left hand, with the thumb and first finger of the same hand hold firmly the edges of the frame which contains the smoked paper. Let the blades of the instrument expand. Holding the frame and penis quite immovable with the left hand, withdraw the cannula gently with the right. The two points will now trace two lines upon the smoked paper, the distance between which will represent the circumference of the urethra. Since the accompanying illustration was engraved I have had added to the instrument a long screw which works by a crank at the end of the frame, and materially facilitates the withdrawal of the cannula. The paper being now removed from the frame and varnished in a saturated solution of gum dammar in benzol, we possess a permanent record of the actual state of the canal, which we can keep and compare with that taken at any future time, perhaps after an operation has been performed. This we may call a "urethragram." The paper is prepared like that used in the sphygmograph by smoking over burning camphor.

Messrs. Weiss and Son have carried out my idea in a very perfect manner, and produced an instrument which is everything that I can desire.

Moorgate-street, E.C.

TWO CASES OF

ENTERIC FEVER: A CONTRAST.

By JAMES FERGUSON, M.B.

THE following two cases when placed together form a useful contrast, and it will best serve practical purposes if we consider first their clinical aspects and then the post-mortem reports.

The first is that of J. P——, aged nineteen, a sailor, admitted into the Perth Infirmary on August 29th. After a stormy passage from London, the lad had great difficulty in reaching the hospital on foot. The temperature on admission was 105° F.; pulse 120. Local signs: well-marked tenderness in the right iliac fossa and a slight general distension of the abdomen; there were but two characteristic spots. During the next eight days the temperature ranged from 100·6° to 105·8° F., reaching the former record only after liberal antipyretic treatment; the pulse was quick and feeble; nervous symptoms particularly prominent; the pupils dilated, and the face flushed and anxious. The tongue became brown, dry, and hard; the iliac tenderness soon spread, and frequent abdominal pain was noticed, though there was but little tympanites. Notwithstanding prompt treatment, diarrhœa persisted, the number of stools varying from four to ten per diem; latterly these were characteristic, but blood was only thrice noticed, and then in small amount. Death from syncope occurred on the ninth day.

The case illustrates the crossing of two of Murchison's types, the irritative and the abdominal, both of which are grave. Remembering the hard usage which the youth received in the early and acute stage of the attack, we need not wonder at any aggravation of the symptoms or at the results. Possibly to the same cause, and more especially the rough medical treatment of the ship master, was due the extreme degree of tissue destruction to which the state of the intestine bore witness.

The second case, J. M——, aged twenty-one, a domestic servant, was admitted on the 14th of October. The illness had begun with a week of malaise, headache, and obstinate constipation. On admission her temperature was 102·2° (8 P.M.), pulse 98; slight distension of abdomen, but neither pain nor tenderness. Mental and bodily inaptitude was marked, and persisted until the ninth day, after which nightly delirium and restlessness set in. Till the twelfth day the bowels remained constipated, but for two days after this there was slight diarrhœa. The temperature was generally somewhat high, though 104·4° F. was the maximum. On the seventh day an erythematous eruption was found on the chest, arms, and legs; but this faded away in two days, again appeared, and in two more days went entirely. The true rose-coloured spots were never found, but a few of a deeper tint showed themselves in successive crops. A frequent loose cough with moist râles occurred, and the weakness of the patient rendered expectoration difficult. Coincident with these changes were increased frequency and weakness of the pulse, which reached from 120 to 128 in the morning, and once to 140 at 6 P.M. About 3 P.M. on the seventeenth day in bed, a suddenly increased pallor attracted attention, when the patient was found to be lying in a pool of blood, very dark and fluid, and with no admixture of solid matter. The patient was unconscious of her condition, though making faint response to questions. The pulse was almost imperceptible. A lead and opium pill was given, with an injection of iced water into the bowel, five grains of ergotine subcutaneously, and an iced bag applied over the abdomen. The patient rallied slightly, but at 2 A.M. a less copious hæmorrhage occurred, and she collapsed in half an hour more.

The remarkable absence of the classical signs in this case is noteworthy. Almost throughout the high temperature was the only striking symptom, but the obstinate constipation is not in my experience at all so rare as is usually stated. Jenner has noted a case in which the bowels were inactive all through, and in which death ensued, as in this, from hæmorrhage. He sets down as the most common cause of costiveness deep ulceration, and cautions against a ready recourse to laxatives. The absence of the typical eruption and the occurrence of an erythematous rash followed by darker spots are interesting in view of Murchison's observation, "Now and then the appearance of the lenticular spots is preceded for two or three days by a delicate scarlet rash all over the body. I have noted this rash in five out of forty-five patients admitted into hospital within the first eight days of the disease." This is the only case in which I have observed such appearances among seventy treated in this infirmary. Murchison's only detailed case was marked by prolonged constipation. The proverbial variety of forms assumed by this disease will be noted in these two cases, and more especially as regards the condition of the nervous system, the temperature, the abdominal symptoms, and, most impressive of all, the contradistinction in the modes of death. In the first we had evidence of extreme destruction of tissue, and yet death was not immediately traceable to that cause; while in the other there were almost no signs whatever of local interference, yet breach of tissue of a most definable kind was the cause of death.

We have now to examine the portions of the intestines presenting the characteristic changes, with the mesentery and its glands from each case. On the peritoneal aspect of the intestine from the first case, about four feet from the upper end of the small bowel, spots of congestion began to occur, at first small, circular, and of pinkish hue, but as they passed downwards becoming larger, more longitudinal, and livid, until they ended in patches with a yellow centre, surrounded by zones of deep congestion. Stripping off the peritoneal coat of the bowel revealed that localised spots of vascularity in that membrane accounted largely for these appearances. We now found towards the lower end of the ileum that a jet of water burst out in the process. This escape took place from three minute orifices, and corresponding with these was a congested state of the peritoneum, so that there was a perforation of the bowel, except in its outer coat. On opening the bowel, the glands were found to be deeply implicated, and with the exception of cicatrisation, there were perhaps none of the characteristic changes unrepresented. There was a terrible amount of destruction, beginning in the solitary glands, about four feet from the pylorus, and as regards Peyer's patches, these were represented by spots of disease varying from half an inch to three inches in length, and also by two still larger areas of ulceration lying in the last nine inches of the bowel. Among thirty-one different spaces, the various stages of change were presented, and in the last ulcer of the series perforation had threatened as above described. This ulcer encircled the whole of the tube, and passed upwards on the ilio-cæcal valve, as far as its margin, involving the whole of its iliac, but leaving the cæcal aspect of the valve free from disease. Passing downwards, now in the large bowel, the vermiform appendix was found highly congested externally,

while inside it was crammed with yellowish-green curdy matter. Over the cæcum, along the whole of the ascending, and about half way on the transverse colon, at first in great abundance, and gradually decreasing in number, were well-formed ulcers, closely resembling the diseased solitary glands of the upper bowel. The implication of the large bowel was exceptional, and very severe. The enlargement of the mesenteric glands was also extreme, some of these being twice or thrice the size of a pigeon's egg.

The post-mortem appearances in our second case contrast strongly with those above described. The changes in the small bowel were confined to the last three feet of its length, and were characterised by large and deep sloughs. It is noteworthy that this has been remarked as a feature of cases distinguished by prolonged constipation. Only four of the Peyerian patches were involved; but it may be mentioned that a limited amount of ulceration existed in the large bowel, which would indicate its implication in cases not necessarily of great severity in the upper track. The large bowel presented an appearance of red staining rather than of hyperæmia, and contrasted with the blanched hue of the duodenum, while this last state was also the opposite of that found in the first case. To complete the contrast, the mesenteric glands were here but slightly affected.

Perth.

REMOVAL OF THE BREAST, FOLLOWED BY SPONTANEOUS FRACTURE OF THE FEMUR.

UNION OF THE SAME, WITH FRACTURE AGAIN FOUR WEEKS AFTERWARDS BY A BONE-SETTER IN ATTEMPTING TO REDUCE A SO-CALLED DISLOCATION OF THE HIP-JOINT.

BY JOHN HAMILTON, F.R.C.S. ED.

THE notes of the following case may be considered somewhat interesting.

The patient, M. O——, aged fifty-six, enjoyed good health, with the exception of an occasional passage of nephritic calculi. She first noticed a slight lump at the inner side of the right nipple, about sixteen months since, which quickly increased until it attained the size of a small orange, attended at times with acute pain. On examination there was found to be no retraction of the nipple, and but slight adhesion of the skin over the tumour, which was of bony hardness, and freely movable on the parts underneath. There was slight enlargement of one or two axillary glands.

In consultation with Mr. Clements of Burton and Mr. Moon I determined, with their approbation, to remove the breast, which I did completely under chloroform. The incision was necessarily a very extensive one, because of the largeness of the mamma and the necessity of removing the axillary glands. On its removal it was at once seen to be a well-marked case of scirrhus. The wound was treated by simple sutures, supported by adhesive plaster strappings, and over all a well-adjusted pad of dry lint. The sutures were removed on the third day, and by the eighth it was entirely healed, without seeing throughout the slightest trace of pus. About three months afterwards the patient in crossing the floor of her bedroom felt something give way in her right thigh and suddenly fell to the ground. Being from home myself at the time, she was seen by Mr. Moon of Gresley, who at once diagnosed fracture of the femur, and took the necessary steps to put it in a favourable position for union. On returning from my holidays a few days after the accident, I examined the thigh and satisfied myself as to there being a fracture. I explained to the patient's relatives the absolute necessity of rest, and in reply to their query told them how long I thought it would be necessary to keep her in splints. On visiting the patient again about a fortnight after, I was surprised to see the apparatus I had constructed for extension placed in one corner of the kitchen, and upon inquiring as to the meaning of its being there, I was informed by her husband—who has since died—that "it was all right." Not waiting for any further explanation I hurried upstairs, wondering to myself how it had got "all right" so soon. Upon inquiry of the patient, she said that she "was sorry I had made a mistake; a bone doctor had been over and found that her hip was out," and, as the patient admitted, took very strong measures for its reduction, one of which was to pull her out of bed. On leaving he assured her that she would be able to get about in a very short time—less than a week. My first impulse was to leave the house at once, but my curiosity got the better of my resolve. I examined the limb, and found, as I expected, the splints removed, the leg shortened by fully four inches, and the slightest manipulation causing intense pain. I now pointed out to the patient and her relatives the harm that had been done, and for the first time informed her (which for obvious reasons I did not wish to do before) that the easy breaking of the bone was in some cases an occasional corollary of cancer, and to prove still further the uselessness of the bone-setter's procedure, left without doing anything to put the limb in position.

A few days after, at the earnest entreaty of her friends, I again visited her, and found that a very great revulsion of feeling had taken place. The former gratefulness to the "bone-doctor" had now given way to a strong feeling of resentment, and an action for damages was loudly spoken of, ending, however, in talk, the game being considered not worth the candle. I now endeavoured to get the thigh once more into position, which I need not say without chloroform (the patient absolutely refusing to have any) was almost impossible, readjusted the splints, and at the expiration of three months there was again firm union. But I am sorry to say there is so much shortening as to almost make the limb an encumbrance rather than a help.

Swadlincote, Burton-on-Trent.

THE ANASTOMOSIS OF THE CORONARY ARTERIES.

BY SAMUEL WEST, M.D.,
PHYSICIAN TO THE CHEST HOSPITAL, VICTORIA-PARK.

THE anastomosis of the coronary arteries is a question of very great importance in cardiac pathology; but the statements in works on anatomy differ, and even in special treatises upon the heart precise statements on this point are often wanting. It is quite certain in disease that one coronary artery is sufficient to maintain the nutrition of the heart. Cases are not very rare in which the mouth of one coronary artery is completely blocked by atheromatous change in the coats of the aorta, and still the heart's nutrition has for a long time been well provided for. In one such case which I have recently examined, the coronary artery, the mouth of which was completely obliterated, was of normal size and appearance even up to the obstruction, and contained blood, which must have been supplied to it from the unobstructed artery of the opposite side. In one of the later editions of Quain's Anatomy this note occurs, in small print:—"It has been customary to describe the transverse branches of the coronary arteries as anastomosing in the auriculo ventricular sulcus, and the descending branches as anastomosing near the apex of the heart; and this description was never doubted until it was found by Hyrtl, as the result of separate injections of these vessels, that the branches of one coronary artery cannot be injected with material introduced into the other." This note has been removed, I find, from the last and recent edition, but there is still in the text a want of definiteness upon the point. With the view of satisfying myself I have lately made a series of injections of human hearts. The material I used was a mixture of carmine and gelatine, which was injected hot into hearts which had been thoroughly warmed in water. Some of these hearts were injected from the left coronary artery, and some from the right. In both cases the whole of the heart was beautifully injected, and microscopical sections showed that the injections had reached even the smallest capillaries. The injection passed with hardly any pressure, and with the greatest ease, into the vessels. So free was the anastomosis between the two coronary arteries, that on injecting into one artery the fluid ran in a considerable stream out of the mouth of the other, and, by pressing in jerks upon the piston of the syringe, could be made to move also in jerks. The fact, then, of the very free and complete anastomosis of the coronary arteries is established. It is

difficult to understand how Hyrtl could have arrived at such opposite conclusions. The most probable view is that he injected hearts recently removed from the body. The only failure which I experienced was with a heart injected as soon as removed. In this the injection failed to run over more than quite a small portion of the heart, not even over the whole of those parts to which the coronary artery injected was distributed. All the hearts, except this one, were macerated for some time in water, in order to get rid of all the blood-clots which might be in the vessels in the recent state. When this precaution is taken success is certain.

Wimpole-street, W.

THE CAUSATION OF CARDIAC AND PULMONARY DYSPNŒA IN DISEASES OF THE HEART.

BY CHARLES STONHAM, M.R.C.S. ENG.,
ASSISTANT DEMONSTRATOR OF ANATOMY IN UNIVERSITY COLLEGE, LONDON, AND CLINICAL ASSISTANT TO THE WESTERN GENERAL OPHTHALMIC HOSPITAL, ETC.

IN advanced cases of valvular disease of the left side of the heart in which there is want of compensation and pulmonary congestion with deficient oxygenation of the blood, dyspnœa is a prominent and very distressing symptom. The so-called pulmonary dyspnœa is persistent, and hitherto has been regarded as the consequence of pulmonary congestion with œdema of the lungs and pleuræ. That these two conditions do certainly produce difficulty of breathing there can be no doubt, but I shall hope to show that there is a third cause constantly at work aggravating the condition, and moreover that this cause under certain conditions produces the paroxysms of cardiac dyspnœa. Attacks of dyspnœa, often of great severity, also occur from the impaction of an embolus in the lung, especially if it is of large size, but in such cases there is frequently a rigor, with high fever, pain in the side, and bloody expectoration. Such attacks are entirely different from those now under consideration, which occur just as the patient is dropping off to sleep. In its general characters the paroxysm simulates an asthmatic attack, but the breathing is more "panting" in character. The hypodermic injection of morphia ($\frac{1}{8}$ or $\frac{1}{4}$ gr.) at once gives relief, which is maintained for several hours afterwards. As yet this cardiac dyspnœa has not received any satisfactory explanation. Dr. J. Milner Fothergill, in his work on the "Heart and its Diseases" (2nd edition, p. 91), speaking of cardiac dyspnœa, says:—". . . . it is certainly connected with the descent of the diaphragm, and is occasioned by flatulence and fulness of the abdomen. In the horizontal position the contents of the abdomen press upon the diaphragm equally with the other portions of the abdominal walls; in the erect or sitting posture they fall away from the diaphragm by their own weight. Dr. Lauder Brunton teaches that in the supine position the diaphragm has to overcome the action of the abdominal muscles; when up only lateral pressure is called for. It is not suggested that this mechanical explanation is the full and complete explanation of orthopnœa." Now, in the first place, if flatus and distension play any part in the production of cardiac dyspnœa, why does it occur when the patient is dropping off to sleep? Surely sleeping does not cause flatulence? And, secondly, with regard to position, cardiac dyspnœa certainly occurs with very great severity in patients who cannot lie down at all; but, at the same time, it is quite conceivable that this may play a part in its production, although, I should imagine, a very insignificant one.

With regard to Dr. Lauder Brunton's theory, it may be remarked that the abdominal muscles during orthopnœa, instead of hampering the action of the diaphragm, really help it, since they become indirectly inspiratory by fixing the lower ribs, and so allowing a more fixed point for the diaphragm to work from. And, lastly, I cannot see why morphia should act so quickly and beneficially if the above explanations are at all correct. We know from physiological experiments that the respiratory centre in the medulla oblongata is stimulated by the circulation of venous blood in it, and furthermore that it is the lack of oxygen, and not the excess of carbonic acid, that is responsible for this. Now, in those cases of heart disease in which cardiac dyspnœa is present there is pulmonary congestion; the blood generally is more venous than natural. This blood circulating in the medulla acts as a stimulus to it, and hence it is in a constant state of excitement, and more vigorous respiratory impulses are generated. I would submit that this condition of excitement of the centre combined with the congestion and œdema of the lungs, is the real cause of pulmonary dyspnœa.

Now, what further causes come into play in producing a paroxysm of cardiac dyspnœa? Firstly, let us inquire what happens during sleep, and then see if any changes occurring could influence the respiratory centre in any way. Sleep is brought about by cerebral anæmia, and hence the respiratory centre is less supplied with blood than during the waking hours, and therefore the oxygen going to it is still further lessened in amount, and the state of excitement is accentuated, and as a result the centre, which was before just kept within bounds, now breaks loose, so to speak, and a paroxysm of cardiac dyspnœa ensues. This explanation of the phenomenon is also borne out by the effects of treatment with the hypodermic injection of morphia. Morphia acts as a nervous sedative, lessening the irritability of the whole nervous system, central and peripheral, so that a greater stimulus is required to call forth any action. The irritability of the respiratory centre would accordingly be lessened, and hence the stimulus of the venous blood would not call forth such vigorous respiratory impulses. The dyspnœa would be relieved. Cheyne-Stokes' respiration, met with in cases of fatty degeneration of the heart, and sometimes in cerebral and renal diseases, has also been attributed to a want of oxygen. Professor Laycock thinks it is due to a sentient paresis of the respiratory centre not necessarily dependent on structural or other diseases of the heart, but Dr. Hayden goes further, and adds to this a want of oxygen; but Biot proved that the arterial circulation is increased, in some cases at least, during the apnœa, and not during dyspnœa. Traube held that it was due to over-action of the vagi by accumulated carbonic acid constantly stimulating their endings; this view is favoured by Biot.[1] Dr. Edis, however, says that this ascending and descending respiration is due to lessened irritability of the centre, so that carbonic acid is not sufficient stimulus.[2]

University-street, W.C.

REMARKABLE EFFECTS OF MASSAGE ON GASTRIC ASSIMILATION AND NERVOUS DEBILITY.

BY J. BERESFORD RYLEY, M.D.

WITH the exception of salicin and its compounds for rheumatic fever, there has not been, I venture to say, any therapeutic discovery of recent times so brilliant in its results as massage in the treatment of functional neurasthenia by Dr. Weir Mitchell of Philadelphia, and the profession is much indebted to Dr. Playfair for its systematic introduction into this country about two years ago I was so struck at the time with his article on the subject in THE LANCET that I determined to give it a trial on the first opportunity, and for this I had not long to wait, inasmuch as a typical case presented itself for treatment shortly after. About the middle of June, 1881, I saw, in consultation with my friend Dr. Hine of Leytonstone, Miss A. C——, aged twenty-one, who for four years previously had been more or less a complete invalid. At the time of my visit she was much emaciated and very anæmic, had a small, sluggish pulse, and an extremely apathetic expression of countenance; her menstrual periods were very irregular and their character most capricious, being sometimes dysmenorrhagic and scanty, and at others profuse and painless. She had no appetite whatever, and for many months "had not taken sufficient food to keep a baby alive," her chief articles of diet being a little Nestle's food or arrowroot and occasionally a few spoonfuls of beef-tea. The least particle of meat or vegetable gave her intense gastrodynia, which usually ended in noisy retchings until the offending matters were brought up. She had frequent attacks of dyspnœa, often followed by a kind of cataleptic swoon, which sometimes lasted for hours. For the last twelve months she had passed the greater part of her time

[1] Vide THE LANCET, vol. i., 1877, pp. 245, 481.
[2] London Medical Record, 1880, p. 15.

in bed, and almost exclusively occupied the services of a most self-sacrificing sister. "The doctor was never out of the house on her account," and the whole family were in a chronic state of alarm at the constantly recurring prospects of her speedy demise. I felt that it would be unwise to at once propose massage in a highly nervous case like this, and so, after temporising for a while, I gradually obtained the consent of the family to this mode of treatment, and for that purpose she was admitted into the Finsbury Home Hospital for Gentlewomen on July 13th. It is unnecessary for me to recapitulate the various steps of this proceeding, as they have already been so graphically described by the author in his little work, "Fat and Blood, and how to make it." It will therefore be sufficient for me to state that after the first week all her abnormal symptoms began to disappear with a rapidity that was truly marvellous, that at the end of the second she was eating and digesting a quantity of food that was almost incredible, and that she left the hospital within two months with an appearance of health, strength, and energy that astonished those who had known her previous condition. She gained flesh and colour rapidly under treatment, but I am sorry that I had not the means of ascertaining the exact amount of the latter.

The next case is that of a young married lady, twenty-one years of age, who had been under my care for some time for general debility, dyspepsia, and cervical catarrh, the results of a miscarriage eighteen months ago. She was a bright intelligent patient, and felt acutely her constant drawbacks to the enjoyment of an easy and pleasant social position. She had no symptoms or history of hysteria, and had been fairly strong until the time alluded to, but since then had gradually lost strength, was fatigued on the slightest exertion, and suffered intensely from acute gastrodynia without any apparently correlative cause. She made but very unsatisfactory progress towards recovery until she commenced treatment by massage on Nov. 10th, 1881, when the dyspeptic symptoms quickly disappeared, from which she has not since suffered, and she left the hospital within six weeks greatly improved in her health.

The third case I will briefly describe as that of a lady, thirty years of age, who had become feeble and dyspeptic from the conjoined effects of rapid child-bearing, menorrhagia, from subinvolution, and chronic ulceration of the cervix uteri. After a very protracted term of treatment, with but little reparative effort on the part of her constitution, the primary causes of her illness were nearly all removed, but she still remained in a very weak state, and suffered much from gastrodynia and the many other morbid symptoms of a feeble digestion. Medicines, and carefully carried-out dietetic rules, did her but little good, but in a few weeks, under the massage treatment, she improved rapidly; the thickly coated tongue became clean for the first time during my knowledge of her, and she left the hospital within a month, having made more progress during that time than almost the whole period anterior to it.

I feel that it would be wearisome to reiterate the history of all the cases that I have treated in this way; and so will content myself by expressing an opinion, founded on them, that in all cases of functional nerve prostration, and its various morbid consequences, massage will seldom fail to effect a rapid cure, and that its influence upon the assimilative and digestive functions of the stomach is especially remarkable; its effectiveness in other forms of disease has yet to be proved, but I am inclined to think that its application will have a much wider range than has at present been assigned to it, and that it will be supplementary to other treatment in most cases where long-continued rest is necessary. I am employing it at the present moment in this way with great advantage in a case of fibroid degeneration of the uterus, with severe and long-standing menorrhagia. The marked anæmia is rapidly improving under its influence, the flesh becoming firmer, and the appetite and digestion greatly increased. It appears to do good also in another way—namely, by employing the patient's mind, and thus relieving the monotony of the recumbent position when long maintained.

I think I have already borne sufficient testimony to the value of massage in all functional derangements of the nervous system, but I have two cases under my care at the present moment which are such striking examples of its efficacy that I will ask to be allowed briefly to record them.

One is that of a young lady, about twenty-three years of age, the daughter of a Norfolk clergyman, who was sent to me three weeks ago suffering from hystero-epilepsy, with hysterical paralysis of a remarkable nature. She had been the subject of epilepsy since thirteen years of age, and had had an attack at night for many months, at least once a week. Since beginning treatment there has not been a single seizure, and the hysterical paraplegia, with incontinence of fæces and urine, which prevented her from standing without assistance, has been so far relieved that she walked to church on Easter Sunday with one of the nurses. It may be said that ordinary treatment under bromide of potassium would have been as effectual, but though I admit that the epilepsy might have been equally well controlled by such means, I cannot think that so pronounced a paralytic symptom would have yielded in so short a time.

The other case is that of a maiden lady, thirty-five years of age, who I went over to Holland to see in consultation with Dr. Van de Noorda of La Hague, under whose care she had been for two years. She had also seen the celebrated Dr. Metza of Amsterdam, but all their remedies combined had failed to do her any good, and at the time of my visit she was getting rapidly worse, and had not left her room for more than a month. It appears that owing to over-study and too close application to her scholastic duties she had broken down and become so nervous and whimsical as to be a misery to herself and a source of worry and anxiety to all around her. The case was quite easy to understand—the old story of mental strain and nervous shock, without any physical disease whatever. I felt sure that massage and change of scene were the only means of saving her from the death or insanity that she believed would be the sole terminations to her sufferings, and with the consent of her friends and after a great deal of persuasion on my part she came over with me to London three weeks ago for that purpose, and is already able to walk about by herself, eat well, sleep better, and take an interest in life and her surroundings.

Finsbury-square, E.C.

NOTE ON MURUNGAI OR MURUNGAH.

BY E. M. HOLMES, F.L.S.,
CURATOR OF THE PHARMACEUTICAL MUSEUM.

THERE can be no doubt, I think, that the plant known to Mr. P. S. Brito under the above names[1] is the Moringa pterygosperma, Gaertn. The name is variously written by different authorities, as Marung-gai (Waring), Mooringay (Jesudasen), or Mooringhy (Drury), and the specific botanical name is the Latinised version of the same word. My friend Dr. Ondaatje, of Ceylon, informs me that it is called the "drumstick" tree on account of the curious pod-like fruit, which when ripe is white, and bears some resemblance to a bone or short stick. The properties of the plant closely resemble those of horseradish, for which Dr. G. Bidie regards it as a perfect substitute.[2] On account of this similarity it is called by the Anglo-Indians the "horseradish" tree. The leaves, flowers, and immature fruits are sometimes used as a culinary vegetable, and are considered by the native doctors in India of value in the treatment of diseases of the liver and spleen. The juice of the fresh leaves is employed to hasten the suppuration of boils. The fresh root is rubefacient and even vesicant, but its application causes great pain. The decoction of the root bark has been given as an emmenagogue, but is said to be liable to produce abortion. The rubefacient and stimulating properties of the plant are also turned to account in the treatment of paralysis and leprosy, epilepsy and hysteria. A great deal more might be said about the medicinal properties of the plant, but all that could be adduced might be summed up in the above quoted opinion of Dr. Bidie. The plant yields a volatile oil, to which its properties are believed to be due. The oil has a very disagreeable odour, and is said by Broughton to be different from either oil of mustard or oil of garlic.

Dr. Ondaatje informs me that so far as his knowledge extends, and he has practised in Ceylon for thirty-six years, the leaves of the drumstick tree are never used in that island in the treatment of hydrophobia, nor is the plant known by its Malayan name, Marung-gai, nor its Tamil name, Mooringa, but by the Hindu one, Sohunjana. He is of opinion that the leaves would not have the slightest therapeutic value in the treatment of hydrophobia. The tree is a very interesting

[1] Vide THE LANCET, p. 724.
[2] Madras Quart. Med. Journ., 1862, vol. v., p. 279.

one from a botanical point of view, being allied to the Leguminosæ in habit, and, indeed, was erroneously included by Linnæus in the genus Guilandina. It resembles the plants of this family in having compound leaves, stipules, and flowers which chiefly differ from those of the tribe Cæsalpineæ in the odd petal being inferior, in the one-celled anthers, tricarpellary, ovary, and anatropous ovules. In the last two characters it approaches Violaceæ as well as in the three-valved fruit, parietal placentation, and hollow apex of the style. In properties it resembles the Cruciferæ, Capparidaceæ, and Resedaceæ. By Grisebach it was placed in the Capparidaceæ, and by other botanists it has been compared with the Polygalaceæ, Bignoniaceæ, and Sapindaceæ. In the classical "Genera Plantarum" of Bentham and Hooker it follows Sapindaceæ as an anomalous genus of doubtful affinity. It is not surprising, therefore, that from description alone Dr. Trail should have referred "Murungai" to the Leguminosæ. Specimens of the pods and root bark can be seen in the museum of the Pharmaceutical Society of Great Britain.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

THREE CASES OF COMPLICATED FRACTURE.

(Under the care of Mr. BRYANT.)

CASE 1. *Fracture of Tibia and Fibula; Division of Tendo Achillis to correct Displacement; Recovery with good Limb.* (Reported by Mr. Paliologus.)—Walter W——, aged twenty-five, was admitted on May 19th, 1881, into Accident ward. The patient, a plate-layer, was employed at his work relaying a sleeper, when a passing engine caught the end of the sleeper, drove it against his leg, and knocked him over.

On admission, there was a simple fracture of the tibia and fibula of the left leg about the middle of the lower third. The fracture was oblique in direction from above backwards and downwards. The leg was put up in a back and two side splints, and an ice-bag applied.

May 22nd: Lower fragment projecting forwards. Splints reapplied.—27th: Fragments still in bad position. Under chloroform, the tendo Achillis was divided and the bones brought into a better position, but the lower fragment still projected upwards and inwards. Wound sealed with tincture of benzoin.

June 8th: Fragments in good position. A pad of cotton-wool has been placed on the outer side of the upper fragment and inner side of the lower.

July 6th: Fragments in very good position, so that the line of fracture cannot be made out.—9th: Splints removed. A slight wound due to the pressure of the splints was found on the back of the calf, and the whole leg was a good deal swollen.—18th: Bavarian splint put on. Very good position.

CASE 2. *Fracture of Lower End of Humerus; Occlusion of Brachial Artery; Relieved.* (Reported by Mr. Winter.)—Jas. H——, aged fourteen, was admitted into Accident ward on July 13th, 1881. The boy was playing in a field with some other boys when he fell on his hand, the arm being outstretched. The fall caused him a good deal of pain, and soon afterwards he noticed a swelling and that his arm was becoming red. It was comparatively free from pain when at rest, but caused acute pain when moved.

On admission the elbow was very swollen and inflamed. There was no pulsation of the radial artery and the hand was cold. The arm was placed in a flexed position and kept so by sand-bags and an ice-bag was applied.

July 14th: A faint pulsation can be felt in the radial artery.—15th: The olecranon process can be felt to be displaced backwards. There is a good deal of swelling round the joint, and the skin is bluish over the injured part. The pulsation in the radial is still faint, but more distinct than yesterday. No pulsation can be felt in the swelling at the elbow.—18th: Swelling subsiding, some œdema of wrist.—19th: The internal condyle is quite distinct, and can be moved by grasping it.—22nd: No pulse to be felt in radial artery.—24th: The arm was flexed to a little more than a right angle and an internal angular splint applied.—26th: Discharged.

CASE 3. *Compound Subastragaloid Dislocation inwards of Foot; Fracture of head of Astragalus; removal of Head of Bone and Reduction; Recovery, with some Movement of Limb.* (Reported by Mr. Winter.)—Michael C——, aged thirty-seven, a labourer, was admitted into Accident ward on Aug. 11th, 1881. The patient fell some ten or twelve feet upon his feet.

On admission there was considerable laceration on the outer side of the left ankle, through which the head of the astragalus projected, the whole of the foot beneath the bone having been displaced inwards. It was at first thought by some that the case was one of dislocation of the astragalus. The patient was taken immediately to the theatre, when the head of the astragalus was found to be crushed at one point, and reduction was impossible. Part of the head of the astragalus was therefore sawn off, and reduction effected. There was very little hæmorrhage. The wound on the outer side of the ankle was about three or four inches long, with clean cut edges. These edges were brought together with two or three silver sutures. The joint was well washed out with iodine lotion. A drainage-tube was put in and the foot was put upon a posterior splint. The wound was dressed with terebene and oil.

Aug. 14th: Parts round the wound are red, glazed, and œdematous.—17th: Had a slight attack of delirium tremens last night.—18th: Red blush around the wound diminished.—22nd: Redness decreased. The discharge is somewhat serous in character; there is no burrowing.—23rd: Redness disappearing; discharge healthy.—31st: There was some redness and tension above the external malleolus, as if there were some inflammation extending up the sheaths of the peronii muscles. An incision was made about half an inch above the external malleolus to relieve tension.

Sept. 7th: Wounds granulating; rather more discharge of pus.—20th: Wound enlarged to give vent to pus.

Oct. 5th: There is œdema extending to the upper half of the leg, and considerable swelling about the ankle-joint. The wound does not discharge, and has a healthy appearance.

Nov. 1st: Drainage-tube discarded.—2nd: There is great swelling of the ankle on inner side; the incision is healed, but in front and behind there is a rounded, soft, elastic swelling, like that seen in pulpy disease. A drainage-tube is inserted above the malleolus, and here there is some redness of the skin, and œdema extending half way up the leg.—9th: Much less swelling of the leg.—15th: Wounds are now quite healed up.—25th: A constant current was ordered on Oct. 15th to be applied to the left arm, as the patient had some wasting of the muscles due to some old injury. Under this treatment the muscles have increased in size, and the patient has more use of the limb.

Dec. 9th: A Bavarian splint was applied.—17th: Discharged.

QUEEN'S HOSPITAL, BIRMINGHAM.

NEPHROTOMY FOR RENAL CALCULUS; NO STONE FOUND; RECOVERY; REMARKS.

(Under the care of Mr. JORDAN LLOYD.)

CATHERINE S——, aged twenty-nine years, married, was admitted on Dec. 19th, 1882. She dated her illness from an attack, ten years ago, characterised by the sudden onset of pain in the right loin of excruciating severity and attended with vomiting; this lasted for about a fortnight. Shortly after this she noticed that her urine smelt badly and contained a yellow deposit. This persisted at the time of admission. She came first under Mr. Lloyd's care in February, 1881, her chief symptoms being lumbar pain, increased by exertion, fetid urine, and frequent micturition. Under ether her bladder, uterus, and rectum were examined, but nothing wrong was found. She had no lumbar swelling. Her urine was acid and contained pus. The bladder was washed out with an injection of dilute nitric acid.

In January, 1882, she had an attack of pain of neuralgic character in the neighbourhood of the right tuber ischii

which lasted three months. On Dec. 10th Mr. Lloyd was asked to see her in consultation with Mr. Hugh Thomas, who was then her attendant. She complained of supra-pelvic pain and tenderness, frequent micturition, and the same lumbar pain as before. On examining the right loin something was felt to slip from under the fingers, she at the same time complaining of a sharp stabbing pain. The urine was fetid with a deposit of pus and ropy mucus.

On admission it was recorded that she was a healthy looking woman, and with the exception of her present illness had always been well. She complained of severe pains in the right loin, which extended from the groin into the labium, and also down the back of the thigh; they were increased by exertion and prevented her walking any considerable distance. Her urine was faintly alkaline, sp. gr. 1014; it contained a small quantity of albumen and gave a reaction to the guaiacum blood test. There was a deposit of pinkish ropy mucus and pus. Microscopically triple phosphates, mucus, pus, and shrivelled blood-corpuscles were seen. She got thinner and all her symptoms slowly became worse.

Dec. 26th, 1882: Under ether Mr. Lloyd exposed the kidney through an oblique four-inch incision about three-quarters of an inch below the last rib. The centre of this incision lay a little behind Allingham's line for the colon, and was directly over the kidney. The gland was not fixed, but moved very freely up and down with respiration. It looked quite healthy at its lower half, which presented in the wound. No resistance could be felt in it. It was punctured in three places with an acupressure needle, a gritty sensation attending the last insertion. The presence of a stone being doubtful, an excision was made through the kidney substance and the whole pelvis explored with the finger, but nothing was found. The hæmorrhage was small in amount and ceased spontaneously almost directly. A drainage-tube was inserted to the bottom of the wound and its lips brought together with silver sutures. There was not more than two ounces of blood lost throughout the operation, which was conducted on Listerian principles except that the lotions were more freely diluted.—27th: Passed a fair night, free from pain; was sick for several hours after the anæsthetic; has passed water containing hardly a trace of blood; wound dressed, the dressings being soaked with thick red fluid; no urea could be detected in the discharges. Evening temperature 103°; pulse 120; respiration 30.—28th: Dressed; she feels comfortable; menstrual flow came on to-day. Temperature at night 104°.—30th: Sutures removed, the wound being healed except at drain. There was a free watery discharge at first. Antiseptics were discontinued until Jan. 22nd, 1883, and two days later she left the hospital, having experienced none of her old pains since the operation. Urine: reaction neutral; sp. gr. 1010; trace of albumen; a few pus and mucous corpuscles and crystals of triple phosphates; there was a slightly fetid odour.

On March 8th, 1883, Mr. Hugh Thomas wrote that his patient was going about her work as usual and has had no return of the painful symptoms, but that her urine continues rather unpleasant.

Remarks by Mr. JORDAN LLOYD.—Since no stone was found in this case I am at a loss to account for the patient's symptoms. That she has a lesion attended by the discharge of pus into her urinary tract there can be no doubt. The chronicity of the pyuria, with the character of the pain, shooting from the loin into the labium and down the thigh, the exaggeration after exertion, the pain on pressure over the right kidney, and the trace of blood in the urine, together led me, so it has turned out, into a wrong diagnosis. I digitally examined the whole surface of the bladder for ulcer, stone, and fistulous opening, on two different occasions and found nothing. The rectum and uterus gave negative results to the most elaborate and careful investigation. The at times intensely fetid urine suggested a possible communication between the intestinal and urinary tracts at some part of their course. There has not been the slightest traces of fæces or gas, however, in the urine. Whatever her disease is, I feel sure it is situated somewhere between the bladder and the kidney substance, and is out of the reach of surgical investigation. It is curious that the operation appears, up to the present, to have relieved her painful symptoms. Similar effects have been previously reported. I have within the last three months assisted at three other kidney operations—a nephrotomy, a nephro-lithotomy, and a nephrectomy, and have been struck by certain facts common to all of them. First, the reliability of Allingham's line as a guide to the gland. Secondly, the distinctness of a layer of fascia which is found really in the kidney fat, lying deeper than the well-known layer which passes in front of the quadratus lumborum muscle. It may easily be mistaken for peritoneum. Thirdly, the mobility of the gland during respiration. Fourthly, the rapid cessation of hæmorrhage from the wounded viscus. In my own case also I was struck by the distinctness with which I could recognise the entrance of the needle into the cavity of the pelvis of the kidney, and in both nephrectomies I was surprised by the almost entire absence of blood from the urine passed after the operation. The conclusions I have arrived at with this personal experience, which is strengthened by the published cases of others, is that these operations are not only justifiable, but are fairly simple and tolerably safe, and that kidney surgery is for the future an established fact.

CLAYTON HOSPITAL, WAKEFIELD.

CASE OF OCCLUSION OF THE VAGINA FOLLOWING PARTURITION, CAUSING RETENTION OF MENSES; EVACUATION; CURE.

(Under the care of Dr. HOLDSWORTH.)

FOR the notes of the following case we are indebted to Mr. D'Arcy B. Carter, resident surgeon:—

Alice H——, married, aged twenty-five, presented herself for examination in the out-patients' room on April 5th, 1881, with the following history:—Nine months ago she was confined of her first child; the labour lasted thirty-six hours, and was a very tedious one, forceps not being used; the child was full term and still-born. Catamenia quite regular up to the commencement of pregnancy, but have never reappeared. There was no dyspareunia before pregnancy, but since her confinement she has been unable to live with her husband. A month after her confinement, at the time corresponding with her menstrual period, she felt very sick and had pains in her back and down her legs, which lasted five or six days, but she did not see any menstrual fluid. These symptoms have reappeared every month at the time corresponding with her former menstrual period, but have gradually got more severe each time.

She was admitted on April 14th, 1881, about the time corresponding with her menstrual period. It was noted:—She is a well-developed but anæmic-looking woman. The breasts are well formed, and there is abundance of hair both in the axillæ and on the vulva. On examination per vaginam an obstruction can be felt at about the lower third of the vaginal canal, completely obliterating the external orifice; the obstruction is tense and elastic, and is continuous with the walls of the vagina. On examination per rectum an elastic swelling can be felt anteriorly, partially blocking up the canal. She has had no difficulty with her water, but has had difficulty in keeping her bowels regularly open. The catheter was passed, and about two ounces of normal urine drawn off. On the evening of admission the swelling was punctured with a No. 2 trocar and cannula, which immediately allowed to escape a dark treacley, grumous-looking fluid; a vessel was placed under the cannula, and the fluid allowed to escape gradually.—15th, 9 A.M.: About fourteen ounces of fluid have escaped during the night, and she feels more comfortable; temperature 98·4° F. 4 P.M.: About three ounces more of the fluid have escaped during the day. It was now decided to enlarge the opening a little. A probe having been passed through the cannula, which was then withdrawn, a hollow sea-tangle tent was then passed over the probe as it was drawn out. The tent was then secured outside the vagina to prevent its passing through into the vagina on the inner side of the obstruction.—16th, 9 A.M.: The tent removed, and a larger sized one replaced. There has been a little discharge through and by the side of the tent during the night; temperature normal. 7 P.M.: There is still a small quantity of fluid escaping. The tent was removed and replaced by one a size larger. She has no feeling of sickness or headache; temperature 101° F. The discharge not offensive.—17th, 9 A.M.: The tent removed. There is now an opening large enough to admit the finger. The obstruction seems to occupy the whole of the middle third of the vagina, and is firmer at the external orifice, having an inclination to readily break down internal orifice. Temperature 100°; no nausea or headache. To be syringed out every four hours with Condy's fluid and warm water by means of a Higginson's enema syringe and a long

tube passed through the obstruction.—18th: There is very little discharge; injections to be continued; temperature 98·4°.—19th: The obstruction was notched on both sides with a curved probe-pointed bistoury, and an ordinary-sized rectal bougie passed, which was to be passed daily. Temperature normal.—24th: The bougie does not cause much pain, so ordered to be increased in size. On digital examination, the os uteri feels soft and open.—30th: Two fingers can now be readily passed through the obstruction.

May 7th: Discharged with instructions to take precautions that the obstruction is not allowed to grow up again.

September 7th: She presented herself at the out-patients' department, and says she feels a new woman altogether. Has menstruated three times since she left the hospital; has no dyspareunia.

November 21st, 1882: She again appeared in the out-patient room carrying a child of which she had been delivered two months previously.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

Nystagmus Infantilis.—Goitre.—Ulcer of Stomach.

THE ordinary meeting of the Clinical Society of London was held on Friday, May 25th, Dr. Andrew Clark, President, in the chair. Several interesting cases were exhibited. It was announced that the Spina Bifida Committee was not able to present a report this session, and that it was still anxious to have the opportunity of examining cases or specimens of this deformity.

Dr. ROBERT LEE read a paper on cases of Nystagmus Infantilis. The first case was one of instrumental delivery with consequent asymmetry of the cranium, atrophy of the right hemisphere, ventricular effusion, and other changes of the right side of the brain. The chief symptoms were frequent attacks of excitement and active movements of the head and body of a few minutes' duration; also nystagmus with left internal strabismus. The question discussed was the value of nystagmus as a measure of central lesion, and its help in prognosis. Other cases were mentioned where nystagmus had followed convulsions, falls on the head, or were traced to maternal influences preceding birth.—The PRESIDENT asked if any histological examination of the brain lesion in the first case had been made.—Dr. ANGEL MONEY replied that he had not yet done this; but he had found that there was no sclerosis in the cervical enlargement of the spinal cord. The atrophy was limited to the sensory area of the brain; the colouration of the atrophied region he had no doubt was due to hæmatoidin, probably from a hæmorrhage during birth.—Mr. B. ROTH referred to a case he had seen of a baby who was an albino and had nystagmus. He asked if this movement would pass off as the child grew.—Dr. LEE thought that nystagmus had been too much relegated to ophthalmic surgery; and he doubted if it were due to intra-ocular defect, especially when coming on in children after a convulsion. He had been trying to learn the diagnostic value of this movement. In one case it varied with the general condition of the nervous system. He thought it was possible to tell the cases in which the movement would pass off.—Dr. A. CLARK said that ophthalmic surgeons only claimed that they found sufficient intraocular evidence to explain the nystagmus. Although central lesions had been met with in some cases, they were all of them such as had been found without the association of nystagmus.—Dr. HADDEN remarked that the right temporo-sphenoidal lobe of the brain handed round by Dr. Lee was greatly atrophied.

Mr. BARKER related a case of Excision of Small Goitre, with recovery. The case brought forward was one in which a small goitre produced great difficulty of breathing on exertion. Excision of the tumour was required, and this operation was followed by complete relief. The patient was a woman, aged twenty-one, who had noticed a swelling in her neck first when fourteen years old. Two years later she began to suffer from difficulty of breathing. Three years ago she was under treatment for a considerable time at a special "throat hospital." This treatment consisted in the first place of simple puncture of the tumour, with evacuation of about half an ounce of brown fluid. Then leeches were applied. Thirdly, injections of tincture of iodine were tried at intervals for three months. Fourthly, a seton was passed through the tumour, and left *in situ* fourteen days. It had to be removed on account of constant vomiting. After this she was treated by "electricity" at another hospital. Ever since the tumour had increased. It measured, at time of operation, three inches in transverse diameter, and two in the vertical, and reached to the top of the sternum. It was firm and elastic; but not fluctuating; was movable and marked by dilated veins. It moved upwards with the larynx in the act of swallowing, and slight pressure upon it produced considerable distress of breathing. The patient was unable to follow her calling as a domestic servant, on account of the difficulty in breathing, which was greatly aggravated on exertion, and became, by her own account, paroxysmal at times. There was no exophthalmos. As all the ordinary means of relieving the condition had failed, Mr. Barker removed the tumour on August the 24th, 1881. This was done with all Listerian precautions as to asepticity. A median incision, about four inches long, gave access to the tumour, which was cautiously dissected out as much as possible with blunt instruments. It proved to be the enlarged right lobe of the thyroid body, the left lobe and isthmus being normal. The latter was ligatured and divided, and the left lobe was not removed. During the dissection, the vessels were tied with double ligatures, and divided between the latter. In this way seventeen silk and six catgut ligatures were used and left in the wound. Hardly any blood was lost, and the important structures around were not interfered with in the dissection. A drainage-tube and gauze packing completed the operation. The next morning all the dressings were found to have slipped and become loose during the night, and salicylic wool was substituted without the spray. The wound healed almost entirely by first intention and without any inflammatory reaction, and the patient left the hospital well on September 14th. On her return from the country she was found to be quite relieved of her former trouble. The patient has been under constant observation now for nearly two years, and has had none of her former distress though she has returned to service. She has had some neuralgia in the neighbourhood of the wound at one spot, which is also a little tender to the touch. Not one of the ligatures left in the wound has ever come away or shown signs of its presence, unless the neuralgia alluded to be taken as such. As the patient suffers from amenorrhœa, however, neuralgia might well be due to other causes. The author suggested the importance of collecting evidence as to the behaviour of aseptic silk in wounds of parts easily accessible to examination, seeing that as regards security and uniformity of texture most surgeons would prefer it to catgut; and if it be shown to be tolerated by the tissues as well as the latter the choice of ligatures would be simplified. This case offered in this direction several points for reflection. The author further pointed out that this was one of those cases which were probably far less uncommon than was supposed where small bronchoceles have produced very serious symptoms. He drew attention to other cases recorded or referred to where small tumours of the kind have produced fatal attacks of dyspnœa, and he concluded by suggesting much earlier operation for such bronchoceles than has hitherto been customary.—The PRESIDENT asked if there were any of the symptoms of Graves's disease. Was the patient anæmic or nervous, or was the circulation excited?—Mr. BARKER replied that she was nervous and anæmic.—Mr. SYDNEY JONES referred to the case of a boy with a large goitre, who had paroxysms of very severe dyspnœa, threatening life. He removed the isthmus only, leaving the very enlarged lateral lobes, tying the isthmus on each side before removal. He found the rings of the trachea quite approximated. The result had been a complete cure, and atrophy of the lateral lobes of the thyroid had ensued; and he suggested that this operation was far better than the dangerous procedure of removal of the whole thyroid. The operation had been performed with equal success on the Continent. It was also notorious that the tracheal cartilages atrophied from the prolonged pressure, and this was a source of considerable peril.—Mr. HOWARD MARSH had lately seen a very distressing case of goitre in St. Bartholomew's Hospital. A man of twenty-one was admitted with extreme dyspnœa from quite a small goitre; tracheotomy was performed above the isthmus, and the introduction of the tube relieved him. During the following night the man died from a sudden attack of

dyspnœa. He thought the removal of the isthmus of the body only was a wise procedure. Mr. Barker's case was a proof that surgeons must not hesitate to act in such cases. As to the use of silk, he remarked that after a case of ligature of a subclavian artery with silk only a fine shred of silk was ever seen. He recently had a case of wiring of bone in which silver wire was healed over without any difficulty.—Mr. PEARCE GOULD referred to the great danger of sudden asphyxia after excision of bronchoceles from atrophy of the tracheal cartilages, and suggested that by leaving the lateral lobes, which acted as splints for the trachea, this accident might be prevented. He mentioned a case of ligature of the femoral artery with silk, and another of wiring together an ununited fracture of the olecranon, in which neither the silk nor the wire escaped, nor gave rise to trouble.—Mr. PARKER had assisted Mr. Reeves to remove the thyroid gland from the neck of a little girl, in whom the trachea was not atrophied, but the dyspnœa was not relieved by the operation, and was probably due to implication of the inferior laryngeal nerves. He had under observation four women with goitre who had dyspnœa at times only, and this, he thought, was not in them due to pressure upon the trachea. He thought the nature of the growth, whether solid or cystic, modified the symptoms.—Mr. HAWARD thought that it was the small bronchoceles which produced dyspnœa, and they were mostly of the fibrous kind, which contracted and embraced the trachea, probably pressing upon the inferior laryngeal nerves. He thought the dyspnœa was more often due to lateral than to anterior pressure. But even in that case removal of the isthmus would be successful.—Dr. R. J. LEE mentioned the case of a girl, aged fifteen, with bronchocele, treated by hot bathing alone, in which the tumour disappeared entirely in less than nine months. He thought there might be some subtle nervous cause at the bottom of some cases of goitre. — Mr. BARKER had found the administration of iodine internally, with its external application, useful in some cases. Only one lobe of this gland was enlarged in this case and the isthmus was not enlarged. He did not notice any alteration of the trachea at the time of the operation, although Dr. Poore noticed before the operation distinct bulging back of the front of the trachea. The growth removed was almost entirely fibrous with large spaces, from which the contents at once dropped out on making a section.

Dr. HABERSHON related a case of Ulceration of the Pylorus, situated at the valve, the floor of the ulcer being formed at the neck of the gall-bladder. It occurred in a gentleman, aged sixty, who began to suffer about nine months before death from pain at the stomach and vomiting; the pain was very severe in character, but most irregular in its onset, and the point of great clinical interest in the case was that "at no time during his illness did food aggravate the pain." The words were quoted from a letter of his medical attendant, Dr. Archibald. There were considerable intervals of relief, and after some weeks of comparative comfort, he was suddenly seized, after taking luncheon with his family, with intense pain in the abdomen, followed by collapse and death in about fourteen hours. The ulcer had extended through the coats into the peritoneum, and thus extravasation of the gastric contents caused fatal peritonitis. The absence of one of the most prominent symptoms of gastric ulcer—viz., pain produced by food, was remarkable. It was stated that the pain of gastric ulcer ceases from various causes, such as the healing of the ulcer, the relief of congestion from hæmorrhage, the division of a nerve from sloughing, or from the position of the patient. In the case narrated there was no evidence of hæmorrhage, nor was there any destruction of the nerve connexion. The ulcer was situated at the pylorus itself, and it was doubtful at first whether it was on the duodenal or the gastric side of the valve. It was divided into two parts by a central contraction, as if there had been a healing process, or as if the ulcer had been double. The base of the ulcer was formed by the neck of the gall-bladder, and it was at this part that perforation had taken place. The walls of the stomach were not thickened, as if there had been pyloric obstruction. It was suggested that the situation of the ulcer had to do with the absence of pain, and that when food was taken the pylorus contracted and the pain ceased.—The PRESIDENT asked if there was pain in the back; he thought this was a valuable sign of ulceration. — Dr. HABERSHON replied that there was no pain in the back.—Dr. MAHOMED said that he had recently had under his care a man who complained of a "ball" rising at the epigastrium, and he himself saw a hard swelling rising up. This "ball" always succeeded attacks of pain. In this case food did not cause so much pain as was usual in gastric ulcer. The man died after a large meal of shrimps. An ulcer in the œsophagus was found which had perforated into the mediastinum. A healing ulcer was found at the pylorus. — Dr. DREWITT asked if it were not possible that many patients with so-called dyspepsia really had ulcers in the stomach. Dr. Graves had recorded cases of gastric ulcer without pain.—Dr. HADDEN asked if the relief of pain in Dr. Habershon's case were not due to the fact that the passage of the food through the pylorus separated the surfaces which had been in contact.—Dr. ANGEL MONEY stated that various nerve symptoms associated with gastric ulcer supported the view that the ulcers were trophic in nature.—Dr. HABERSHON had frequently recognised an apparent "ball" at the epigastrium, due, he thought, to flatulent distension; in one case an hourglass contraction of the stomach was present. In the case he had related there was no such symptom present. He thought the cases referred to by Dr. Drewitt should rather be referred to nerve lesions than to ulceration. He thought the pain was relieved by the contraction of the pylorus. There was no hypertrophy of the stomach, showing there had been no obstruction at the pylorus.

The following cases were also shown:—1. Case of Remarkable Dislocation of several Joints, by Mr. Lund. The President nominated Dr. Duckworth, Dr. F. Taylor, Mr. Pearce Gould, and Mr. Howard Marsh to form a committee with Mr. Lund to report upon this case. 2. Myxœdema in a Man and a Woman, by Mr. Lund. Case of Myxœdema in a Woman, by Dr. Drewitt. 3. Ulceration of Soft Palate in Inherited Syphilis, by Dr. Drewitt. 4. Infantile Hemiplegia, with unusual Reflex Phenomena, by Dr. F. Taylor.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

The International Medical Congress.—The Practice of the Bone-setters.

AT the usual monthly meeting of this Society, held on Friday, the 4th ult., Dr. E. Hart Vinen in the chair,

Dr. THUDICHUM, who had attended the recent International Medical Congress at Wiesbaden, stated that that body had met with a view of advancing medicine to the level of the natural sciences. The question of the extermination of infectious diseases was fully discussed, but no new theory of particular value was advanced. Naturally, in a city where there were continual experiments in chemistry on a large scale—in the chemical factory in that city thirty professors confine their attention to theoretical chemistry — great attention was paid to the action of medicines on the human system, but it was acknowledged that the chemistry of the body was badly understood, and that definite results from the action of medicinal agents could not be looked for at present. A clinical professor from Berlin gave an interesting account of the result, in forty cases, of the treatment of tuberculosis with corrosive bichloride of mercury by means of the syringe; but, although benefit was said to have been derived by some of the patients, he regarded phthisis as being left where it was, and could not recommend its adoption. In some of the German hospitals he found that tubercular disease of the lungs was being treated surgically. A rib was excised, and, with every antiseptic precaution, the diseased portion removed. Patients so treated had recovered in some cases. He hoped to continue his remarks at a future meeting.

Dr. BRUCE CLARKE read a paper on the Practice of the Bone-setter, in which, after briefly alluding to the variety of cases that found their way to the bone-setter, and derived benefits from his treatment, he adverted to the pathology of stiff joints, and showed from observations of several cases which he had been able to examine after removal of the limb, that adhesions were usually found outside joints and tendon sheaths, and were due to contractions of the connective tissue of the limb. Adhesions were rarely formed inside the tendon sheaths or joints, and when they were the disease was far more serious, and rarely yielded to treatment. In cases of old stiff joints the skin, and probably the subcutaneous tissues, became weakened and atrophied by disease, and were so rendered more liable

to injury—in proof of which he cited several examples of tearing and laceration of the skin without the employment of undue violence. The usual history of the class of cases that came under the hands of the bone-setter was this. The patient met with an injury resulting in a dislocation or fracture, or perhaps only a severe bruise or sprain. He readily recovered up to a certain point; but when all inflammation had subsided there remained a stiffness, accompanied by pain on movement. In other cases there were periodical attacks of synovitis. The treatment in all such cases was active movement, with or without chloroform, which was usually accompanied by a click or crack, ascribed by the bone-setter to the replacement of bone, but which was due to the freeing of the connective tissue bands. In slight cases one violent flexion might cure the trouble of months; in severe cases the treatment would be measured by months rather than minutes. The pathology of such cases was as well marked as that of iritis, where there was the advantage of seeing the adhesions not only form but rupture and disappear. He expressed his obligation to Mr. Wharton Hood's lecture which had induced him to study the subject. The difficulty with these cases was the selection of time for rupture, and for rest. Signs of inflammation were their guide in that matter. Rest should be relegated to its proper position in surgery, and should not be kept up when it increased instead of abating the patient's troubles.—Dr. KEETLEY thought Dr. Clarke could hardly have chosen a more interesting subject. Undoubtedly the bone-setter frequently earned great credit by the manipulations which broke down adhesions outside a joint, and at the same time removed the cause of inflammation, for in these cases there was no contraction of membrane. When there was an osseous fibrous band the case was of a strumous origin; it was due to the presence of organisms. In such cases the joints became altered, and there was great danger from the rough usage of the bone-setter. In the treatment of such joints he had put on ice for several days with great advantage, and had repeatedly put them straight. When once convalescent a joint rarely again became strumous. There was much bewilderment with regard to the value of rest, which was only a negative factor. It was the natural tendency of a colony of germs to die as the joint became healthy.—Dr. ALDERSON related the case of a knee which became enlarged fourteen days after confinement, but without pain. He called in Dr. Hewitt, who ordered rest, and the knee to be rubbed with salad oil. He also used Scott's dressing. Subsequently, at Brighton, a seaweed poultice was used. The treatment was successful. He had also known an enlarged ankle which was cured by the use of a lotion and embrocation, proving that there was no fracture.—Dr. ALLDEN OWLES had seen several cases confirmatory of the opinions advanced in the paper. One was a shoulder, the manipulation of which caused agony to the patient, but in which motion was regained. Another, regarded at first as a strumous joint, was eventually cured by somewhat violent manipulation.—Dr. VINEN referred to the case of an officer of the 60th Regiment who sustained a compound fracture below the knee whilst playing at football in India. The bones were set by some naval surgeons who were watching the game, but in consequence of the leg being deformed, the adhesions were broken and the limb was reset. The ankle then remained fixed, and the patient's health suffered. However, Mr. Erichsen was called in; he broke the adhesion, and the patient recovered so thoroughly that he was enabled to rejoin his battalion in the Transvaal.—Dr. BRUCE CLARKE, in reply, pointed out the necessity of distinguishing chronic cases, as such were usually made worse by movement.

ACADEMY OF MEDICINE IN IRELAND.

Sudden Change in the Colour of the Hair and Skin. — Locomotor Ataxy. — Ulceration and Perforation of the Intestines.

A MEETING of the Medical Section was held on Feb. 16th, Dr. William Moore, President of the College, in the chair.

Dr. H. C. TWEEDY exhibited two cases of Locomotor Ataxy; Dr. G. F. DUFFEY showed a specimen of Farre's Tubercle of the Liver; Dr. J. W. MOORE, a specimen of Pulmonary Tuberculosis in a girl, aged twelve, with secondary infection of the intestines; Dr. LENTAIGNE, a specimen of Ulceration and Perforation of the Intestines, with microscopical sections by Dr. SCOTT; and Dr. REDMOND, a specimen of Bright's Disease of the Kidneys complicated by Peritonitis.

Dr. BANKS, President of the Academy, who, owing to domestic reasons, had been unable to attend any of the earlier meetings, expressed his gratification at having been elected President, and said, to be well thought of by one's fellows, especially by one's brethren in the profession, was of the greatest satisfaction. He had no words to express adequately his acknowledgments.

Dr. H. J. SMYLY read a paper on Sudden Change in the Colour of the Hair of an infant. The child was perfectly healthy to all appearance until he was four months old. He was then attacked with acute inflammation, followed by suppuration in the left temporal bone, the symptoms being pain, heat, and swelling about the temporal region, with high fever and profuse perspiration, and paralysis of left side of the face. One morning (Nov. 1st last) the hair on the right side of the head was discovered to have undergone a remarkable change from its original mouse-coloured hue to a reddish-yellow. The right eyebrow was similarly affected, and the skin of these parts, as well as that of the right hand, was icteric. The pillow also was saturated with a reddish-yellow perspiration. The abscess, which had formed very slowly, pointed behind the ear, and was evacuated by a free incision. Although the child subsequently became hemiplegic, it made a fairly good recovery. The suggestion offered as to the possible cause in this remarkable change of the colour of the hair, was that the perspiration, which was of a peculiar colour and probably of abnormal chemical constitution, not only destroyed the original pigment, but also dyed the hair a reddish-yellow colour.—Dr. BANKS referred to a case which had come under his notice, that of a young woman. Half of the lashes of one of her eyes became snow-white, which she attributed to the annoyance suffered from the persistent gaze of a "wall-eyed" admirer, who had white lashes on the defective eye.—Dr. WALTER SMITH related the case of a boy in whom the skin of the lobes of both ears and that of the back of the neck was of a sulphur yellow, the downy hair being of a bright-yellow hue. The hair of the head was brown. The yellow colouring could be readily removed by a moistened cloth, but no washing could decolourise the skin, nor did ether or chloroform produce any effect. He exhibited specimens of the hair. He also referred to a case of red discolouration recorded by Wilson. After relating the case described by Darwin, in which the hair of a criminal brought out for execution turned white in the presence of the spectators, he said he could not agree with Mr. Smyly in ascribing bleaching properties to the perspiration, but did not give any explanation in lieu of it.—Dr. Charles Moore, Mr. Lentaigne, the President, and Mr. Grimshaw also joined in the discussion.

Dr. H. C. TWEEDY read a paper on Two Cases of Locomotor Ataxy, and exhibited the patients. The first case was that of a pensioner, aged sixty-four, who was admitted into Steevens' Hospital in 1871, presenting most of the symptoms of the affection: the peculiar gait, the absence of coördination and the neuralgic pains characteristic of the earlier stages of the disease. He was treated with nitrate of silver in doses of one-third of a grain three times a day, and continued the use of the drug at intervals for nearly twelve years. The ataxic symptoms had completely disappeared, but from the length of time the silver had been taken the patient had become argyrised. Attention was invited to the peculiar leaden discolouration of the skin, and the opinion of the members was requested as to whether these symptoms clearly indicated a case of tabes dorsalis, or one of those rare cases in which the progress of the disease had been arrested and a cure had followed, either spontaneously or as the result of the remedy employed. The second case was that of an engine-driver aged forty-two, in whom the disease was only of six months' standing. This patient also exhibited most of the phenomena of the early stage of the disease; but in addition there were consecutive attacks of a cutaneous eruption resembling erythema, entirely confined to the left side of the body, and unaccompanied by any of the usually attendant neuralgic pains. There was also a patch of an eruption resembling psoriasis on the back of the left wrist, a similar patch existing at the opposite side. Attention was drawn to the fact of eruptions, usually bilateral, appearing only on one side of the body, the connexion between this and similar eruptions occurring as trophic lesions in tabes dorsalis, but

accompanied invariably by lancinating pain along the course of the nerves over which the eruptions were found.—Dr. BANKS, having seen a great many cases of locomotor ataxy, was of opinion that in a considerable number the disease remained stationary, and in others disappeared. He had used nitrate of silver with great advantage, and did not participate in the terror some had of its effects in producing discolouration of the skin. He had once seen it occur in a case of epilepsy. He believed in the existence of a syphilitic taint in a large proportion of cases.—Dr. GRIMSHAW remembered the case brought forward by Dr. Tweedy. The result of the treatment was admirable.—Dr. NIXON agreed with Dr. Banks as to the frequency of arrest and even occasional cure of the disease, especially in cases in which syphilis existed. He considered the skin affection in one of Dr. Tweedy's cases as a coincidence, and preferred referring it to syphilitic origin. — Dr. ROBINSON asked whether either of the patients was addicted to the abuse of stimulants.—Mr. LENTAIGNE mentioned a case in which Langenbeck stretched the sciatic nerve and the symptoms disappeared. A subsequent autopsy showed the spinal cord to be perfectly healthy.—The PRESIDENT related a case of syphilitic origin which recovered under the use of iodide of potassium.—Dr. TWEEDY, in replying, said that in the case which had recovered the man had no syphilitic history. Neither patient had been addicted to intemperance.

Mr. LENTAIGNE read a paper on a case of Ulceration and Perforation of the Intestines, which was remarkable on account of the great obscurity of the symptoms. It was that of a man, aged thirty, who had been admitted into the Jewish Hospital, Dec. 6th last, complaining of cough and debility, and who died there, Dec. 19th, from peritonitis consequent on perforation of the intestines. After his admission he had been carefully examined by Dr. MacSwiney, physician on duty, but no evidence of organic disease could be found. Both pulse and temperature were perfectly normal, and the lungs apparently sound. After a few days the man asked leave to go home, feeling perfectly well; but on Dec. 11th, on leaving the watercloset, he was suddenly attacked with all the symptoms of acute intestinal obstruction. These continued unabated until the 14th, when his bowels were freely moved by enemata, after which he had four free motions, passing large quantities of liquid yellowish-brown fæces. Next day he seemed better, the pain having ceased, and the vomiting only occurring after long intervals. The ejected matter consisted of recently administered food. On the following day all the severe symptoms returned, and the man died on the 19th, eight days after the inception of the symptoms of obstruction. At the post-mortem examination, besides the usual signs of recent general peritonis, there was found a large collection of purulent matter occupying that part of the peritoneal cavity which lay in the right inguinal region, the right half of the hypogastric region, and the cavity of the true pelvis. It was apparently localised by the matter of the intestines. On removing the viscera the pleura was found to be ulcerated in its lowest part, and the perforation had taken place through the floor of one of the ulcers. It was situated in one of the coils forming the boundary of the pus-containing cavity, and was apparently sealed up by adhesive inflammation of the peritoneal coat. The spleen and mesenteric glands were enlarged. The lungs were to all appearance healthy. Mr. Lentaigne believed the case to be either one of typhoid fever or of ulceration as the result of a previous attack of typhoid; and he drew attention to the great tenderness and pain over the thyroid foramen, and for a few inches below Poupart's ligament of the inner aspect of the thigh, a condition which, when coupled with the symptoms of intestinal obstruction, might easily lead to a mistaken diagnosis of obturator hernia, due to pressure or inflammation of the obturator nerves before their exit from the thyroid foramen.—Dr. MACSWINEY said that when the patient in the early stages of his illness was under his care, he did not present any symptoms of typhoid fever.—Dr. C. NIXON insisted on the importance of splenic enlargement in the diagnosis of typhoid fever.—Dr. J. W. MOORE said that great pain in these cases was a most unfavourable symptom. Perforation was sometimes produced by over-distension of the intestines consequent on the formation of gases by the decomposing fæcal matter. The patient, he considered, had passed through typhoid fever before his admission to the hospital.—Mr. LENTAIGNE, in replying, agreed with Dr. J. W. Moore that the case was one in which the typhoid fever had been passed through, and that the perforation was the result of necrosis, a sequela of the fever.

Reviews and Notices of Books.

The Sanitary Contrasts of the British and French Armies during the Crimean War. By Surgeon-General T. LONGMORE, C.B. 8vo, pp. 31. London: Griffin and Co. 1883.

THIS work of Mr. Longmore's brings before the profession, and especially the military branch of it, a very concise and interesting view of the sanitary condition of the French and British troops during the campaign of 1854–56 in the Crimea, the remarkable differences in the two forces, and the causes to which these were attributable. Though upwards of a quarter of a century has elapsed since the termination of that war, and though much has been written regarding it, we are not aware of any work which brings into contrast the state of the allied armies from a sanitary point of view, and we are therefore pleased to find this desideratum so ably supplied by one entitled to speak on the subject with great authority. The necessity for such a work is all the greater owing to the misleading remarks by Mr. Kinglake in his recent volume, in which, as Mr. Longmore justly remarks, "avoiding uglier designations, that might grate upon the ears of his readers, he applies the euphemism of 'winter troubles' to the ghastly sacrifice of lives and inexpressible suffering among the troops, the mere recollection of which still causes a shudder to those who were familiar with the tragic scenes that took place, day after day and night after night, in that part of the army which was encamped in the front before Sebastopol in the winter of 1854–55." Mr. Longmore has brought together the statistics of mortality in the two armies, divided into periods of four months from September, 1854, to April, 1856. It would be impossible in the space at our disposal to enter into all the details thus given; we shall therefore merely note, with regard to the British army, that during the first winter the mortality among the troops was frightful, amounting in six months to one third of the average strength, while in the second winter it was so much reduced as to be little above what would have occurred had the men been serving in England. In the French army, on the contrary, the death-rate in the first winter, though high, did not approach to anything like that of the British, but in the second winter it was nearly one-half higher than in the first, and more than thirteen times that of their allies during the same period.

Mr. Longmore discusses the circumstances which led to the fatal sickness in the British army during the first, and its remarkably healthy condition during the second, winter, and to the comparatively healthy state of the French army during the first, and its increased sickness and mortality during the second, period. The condition of the British army in the first winter he attributes to our "neglect of the old maxim, to be prepared for war in time of peace," and to our disregard of even the elementary teachings of sanitary science. Our troops, whose general health had been impaired by their stay in the unhealthy valleys of Bulgaria, were landed in the Crimea, "without tents or cover, every one lying and sleeping on the damp ground; and subsequently the hardships, privations, and suffering of the winter siege, the exposure to cold, and the loss of rest in the trenches and on picquet duty at night; the ill-suited clothing, the tight coatee, and closely fitting trousers of that time; the want of fuel; the want of means of personal cleanliness; the excessive overwork, increased, as the numbers lessened, among those who remained; the want of adequate nutriment, all hygienic rules outraged in respect

to sufficiency, quality, variety, and cooking of the food—the rations consisting almost exclusively, for a considerable time, of salt meat and biscuit, without vegetables." With regard to the medical arrangements, he observes: "Had the recorded experience and recommendations of army surgeons who had served during the Peninsular wars been acted upon, there would have been an organised army hospital corps, suitable field hospital establishments, suitable field hospital transport, adequate in amount and ready at call for service; but there were none of these when the campaign commenced." The French, on the contrary, "started with the necessary equipment for service in the field; officers and men were familiar with the use of it, and duly estimated its importance." They had their *tentes d'abri*, their ambulance waggons, their fur overcoats, their bakeries, their well-organised transport, and the troops generally were well instructed in the practice of cookery. These differences sufficiently account for the marked contrast in the health of the troops during the first winter. To what, then, was the remarkable change in their relative condition due in the second winter? Mr. Longmore considers it very easily explained by the extraordinary efforts made by the people of England to retrieve the disasters of the first winter and to obviate their recurrence: the abundant supplies of food and comforts of all kinds, of clothing, shelter, and transport, which were provided without stint; the improved conservancy of the camps, and the strict enforcement of sanitary regulations. But while this was being done for the British Army, the French began to suffer from neglect of these very matters. "The French in the second winter had got into circumstances very similar to those of the English in the first winter, while there was neither the enthusiasm on the part of the French nation nor the pecuniary means which had been called forth on the British side to effect a similarly favourable change in the sanitary condition of the French troops. ..... Neglect of the advice of those who were competent to advise on the means necessary for preserving the health of the troops, and the authority of the intendants, who were quite incompetent to give directions on hygienic matters, led to the development of the scurvy and typhus which broke out among the French troops, to the constant increase in virulence of these diseases, and at last to their diffusion in such overwhelming proportions that all available resources were powerless to cope with them."

Mr. Longmore has done good service in bringing to notice the special circumstances which exercised so disastrous an influence on our army in the Crimea, and the measures which were adopted to restore its health. They are well deserving of study by all who take an interest in the welfare of our troops, and especially of those who are responsible for the efficient organisation of our army and of those on whom the practical application of the measures devolves. The recent campaign in Egypt, though it showed nothing so disastrous as that of the Crimea, found us in the old condition of unpreparedness to take the field. On this, as on most previous occasions, the want of an organised and efficient transport seemed to be at the root of all the sufferings to which the men were exposed, and to an efficient organisation of this branch of the service it is manifest the attention of authorities ought to be immediately directed. We observe that Mr. Longmore calls attention to the unfairness with which Mr. Kinglake has treated the statistics of the French army in the Crimea, published by the late Dr. Chenu. We are not the least surprised at this after the exposure which Sir John McNeill, whose death at a ripe old age we recorded only last week, made of the misleading statements by Mr. Kinglake on the subject of the Crimean Commission, and of the "ludicrously inadequate" cause assigned by him for the fatal privations suffered by our troops in the Crimea.

Health Lectures for the People. Third Series. Delivered in Edinburgh during the Winter of 1882–83. 8vo, pp. 218 Edinburgh: MacNiven and Wallace. 1883.

THIS volume consists of the lectures delivered at the request of the Edinburgh Health Society during the past winter. The object of the Society is "to promote by all the means in its power attention to personal and domestic cleanliness, to comfort, self-denial, temperance, and the laws of health generally." The subjects treated in the present volume are: Ventilation, Physical Exercise, Brain Health, Domestic Economy as regards Food and Cookery, the Ear in Health and Disease, the Eye the Organ of Visios, Minor Ailments and their Treatment, Nursing the Sick, and Sanitary Law and Administration. These lectures of course vary much in quality. Some of them appear to be over the heads of the class for whom they are intended, while others are remarkably well adapted to promote the objects the Society has in view. In the latter group may be noted Dr. Douglas Maclagan's clear, intelligible, and practical lecture on Ventilation, Miss Phœbe Blyth's on Food and Cookery, Dr. Jameson's on Clothing and Household Arrangements, and Dr. Halliday Croom's on Nursing the Sick. The concluding lecture, by Mr. W. C. Smith, of the Scottish Bar, gives an interesting summary of the state of sanitary law and administration in Scotland, with some suggestions for its improvement. The lectures are also published separately, at a very low price, for circulation among the people generally, and appear likely to direct their attention to the most important subjects bearing upon the preservation of health.

Warming and Lighting the Dwelling; their bearing on Health and Disease. By JOHN ANGELL, Science Master, Manchester Grammar School. London: Heywood. 1883.

THIS also is one of a series of Health Lectures for the People, and is published at a nominal price by the Manchester and Salford Sanitary Association. It was illustrated by experiments of a popular nature showing the effects of respiration and combustion on atmospheric air, and was apparently intended for a more highly educated class of persons than those to whom the lectures at Edinburgh were addressed. We cannot doubt that the labours of these Societies to spread a knowledge of sanitary principles among all classes of the people will have a beneficial influence in promoting the public health and in diminishing the amount of preventable disease. From their low price they are well suited for general distribution.

Principles of Health in Childhood, Manhood, and Old Age. By LOUIS KING, M.R.C.S. 8vo, pp. 185. London and Bath: Hamilton and Co. 1883.

THE object of this book is much the same as that of the Health Lectures already noticed. It directs attention to errors in ventilation and drainage of houses; it discusses the principles on which the diet and general management of children and aged persons should be conducted; and it concludes with instructions respecting the immediate treatment to be adopted in accidents and emergencies. The introductory chapter on Physiology might, in our opinion, have been advantageously omitted, and the other portions would bear judicious condensation. The work altogether is too diffuse, although there is, no doubt, much good advice in it, especially with reference to the management of children. A good index would add greatly to its value.

THE BRITISH MEDICAL BENEVOLENT FUND.—We are asked by the Treasurer of this fund to announce the receipt by him of a second donation of £100 from the Hon. James George Beaney, M.D., of Melbourne.

A MUNICIPAL Laboratory of Hygiene has been founded at Lisbon.

THE LANCET.

LONDON: SATURDAY, JUNE 2, 1883.

THE Report of the Committee presided over by Lord MORLEY has at last been distributed, ten days after it had been communicated to *The Times*. We are not astonished at Lord HARTINGTON'S expression of regret at the misleading nature of the notices of it which appeared in that journal. After a careful perusal of the Report, we can only express our surprise that so little has been found which can in any fairness be considered condemnatory of the Medical Department of the Army as regards its organisation or working. The complaints of many of the newspaper correspondents, and the loud outcry got up by certain parties, led us to believe that some strong evidence of a break-down might possibly be forthcoming, but we have failed to find it in the Report of the Committee. That there was ground for complaint on some points must be admitted, but in most instances it was not from any defect of the Medical Department, but arose either from the changes in the military arrangements, which were a matter of necessity arising out of the special circumstances of the campaign, or from the insufficiency of the transport, due probably to the same cause.

The Report gives a brief description of the organisation of the Medical Department of the Army, its hospital system in peace and in war, and its hospital ships and naval transport. This is followed by an account of the provisions made for the medical service of the Egyptian expedition, which appear to have been on a liberal scale, and in the opinion of the Committee were "amply sufficient." A description is then given of the arrangements in Egypt for the treatment of the sick and wounded in the field and in the hospitals established there. This is succeeded by remarks on the evidence taken. The Report is brought to a conclusion by recommendations for the improvement of the service as regards (1) its organisation in peace, (2) its organisation in war, and (3) the Army Medical Department and Army Hospital Corps. A summary of the chief of these recommendations we hope to find room for in our next issue.

With regard to the complaints brought against the department, the Committee considered them under four heads—nursing, equipments, medicine, and food. They were of opinion that the nursing was not satisfactory, and that the supervision of the orderlies in the wards was defective. But they do not lose sight of the fact that the men of the Army Hospital Corps were much overworked, especially at first, and that "in addition to their duties in the wards they were employed in fatigue duties outside the hospital, in landing the hospital stores, and in dragging them in carts to the KHEDIVE'S palace; and they were also called upon at all hours of the night to provide stretcher parties to convey large numbers of invalids from the canal or railway station to the hospital." As regards the complaints of the hospital equipment at Ismailia, they state that, in accordance with the arrangement made in England, it was equipped as a field hospital, and not as a general or base hospital; and they distinctly contradict the statements which were made as to deficiency of medicines and improper treatment, which appear to have been "based on a misapprehension of facts or on insufficient evidence." They also contradict the statements as to deficiency of medical stores and as to want of food at Ismailia. The bread undoubtedly was bad, but this was due to the quality of the flour sent out from England. The cooking of the food, however, was not satisfactory—a defect attributed to the want of training on the part of the cooks of the Army Hospital Corps. As regards the treatment and removal of the wounded from the field of battle, the Committee consider that the arrangements were "well conceived and efficiently carried into effect."

The amount of professional work which fell upon the medical officers has been thus briefly summarised in the Report: "We would direct attention to the statistics furnished us by Surgeon-General HANBURY, which give the results of the treatment of the sick and wounded in all the hospitals of Egypt from the 17th of July, when the first battalions landed at Alexandria, to the 9th of October, the date upon which the force ceased to be considered an army in the field. During that period the strength of the force (including the Europeans of the Indian contingent, but not the Royal Marines) is shown to have been 13,013 non-commissioned officers and men; the number of admissions to hospitals was 7590 (viz., 378 wounded in action, and 7212 suffering from diseases or injuries); the number of deaths returned is 172; 74 died of disease, 5 from accidents, and of the remaining 93 eighty-two were killed in action and eleven died of their wounds subsequently. The admission rate per 1000 was 582·3, and the death-rate 13·21. The number of men invalided to Malta or England was 2321. Thus up to the 9th of October less than 3 per cent. of the wounded men admitted to hospital died; of the remaining 7212 admitted to hospital 74 died of disease. There remained under treatment in the hospitals in Egypt on that date 1444. The figures give a death-rate for the whole force of 24·30 per 1000 per annum. Of the officers 10 were killed in action and 52 were wounded, of whom 2 died and 48 were invalided to England before the 9th of October. These figures speak for themselves of the skill and care with which the medical officers must have performed their professional duties in Egypt. Much credit is also due to the medical officers for the absence of pyæmia and other diseases incidental to hospitals in war."

We have been unable during the short time which has elapsed since the Report became available to us to enter more fully into the various questions discussed, but we trust to do so in future articles. Meantime, we would recommend all who have an opportunity to read Sir W. MACCORMAC'S remarks appended to the Report, in which he discusses some of the conclusions arrived at by the Committee, and states the grounds on which he has arrived at a different conclusion. We would call attention especially to the interesting comparison he makes between the amount of work done by the medical officers in the hospitals at Ismailia and Cairo, and that in the largest of our London hospitals, as tested by the daily admissions into each.

DURING the past six months we have published numerous contributions relative to the most suitable reagents and best methods for the detection of albumen and sugar in urine. The interest that has been excited by this question is an evidence of the revived appreciation of questions of pathological chemistry which seems to be gradually setting in. The new tests, or, to speak more accurately, old tests resuscitated, have been introduced with a view ostensibly of facilitating urine-testing at the bedside; in short, to do away with the cumbersome paraphernalia of spirit-lamp and bottles of nitric acid, copper solution, &c. If the introducers could have stopped short at this laudable intention, the student and practitioner would have been duly grateful; but unfortunately so many abstruse chemical and physiological questions had to be considered that a general bewilderment has been the result. So much has this been the case that the Clinical Society has appointed a committee to report on the tests for the detection of albumen and sugar that have been brought under the notice of its members during the past session. The report will no doubt be an exhaustive one, and, to those unacquainted with the literature of the subject, interesting; but it can hardly add much that is new, since students of physiological and pathological chemistry are already fully acquainted with the range and capabilities of the so-called new tests, allusions to which will be found in most of the foreign journals and the text-books devoted to this question.

To take the subject of albumen first, it will be found that all the new tests are more or less applicable for the detection of proteid substances in urine, whilst no one of them especially indicates the presence in its unaltered form of serum albumen. To detect this it is necessary to apply heat, since this body coagulates at temperatures between 73° and 75° C. But not only do these new tests fail to distinguish serum albumen from other proteids, but most of them likewise give a reaction with other bodies met with in the urine, as mucin, peptone, parapeptone, and the like. It is probably owing to the precipitation of these substances, in some instances, that the new tests have laid claim to extreme delicacy. Again, some of the introducers have stated that the tests will discover traces of albumen after it has been separated by coagulation by heat, thus showing that their test is more reliable than the "coarser" method of heating for the detection of minute traces. This assumption is based on a fallacy, since it is extremely difficult to separate all the albumen by heat, a small portion always coming through the filter with the filtrate. The Germans have been aware of this fallacy for some time, and give minute directions as to the individual and complete separation of mucin, peptone, and albumen, in all cases where an exact examination is called for.

The picric acid test seems to us the best of the new reagents. It is certainly more delicate than nitric acid, as it is more manageable and portable, whilst it has the advantage of being made available for sugar-testing. One objection raised against it—the bulk of its solution—is really no practical disadvantage, since, if employed, as Dr. JOHNSON suggests, by carrying a few grains of the substance in bulk in a small box, and dissolving a pinch in half a wineglass of water, the solution is readily made at the bedside of the patient. Picric acid, however, like most other reagents except heat, precipitates every variety of proteid substance, as well as mucin, parapeptone, albuminose, and urates if present in excess, and these have, therefore, to be identified by distinguishing reactions. In this respect, however, picric acid is equally at a disadvantage with nitric acid and many other reagents. If at the present moment we were asked what test, after all, we should rely on for the detection of serous albumen in urine, we should unhesitatingly answer, Heat. If an ordinary test-tube be filled nearly full with filtered urine, and the upper end be heated whilst the lower portion remains cold, the minutest trace of albumen will be revealed by the haze given in the warm portion, which shows up in strong contrast with the clear cold portion. A drop of acetic acid, or ordinary vinegar if at a patient's house, will determine if the haze be due to phosphates, whilst neither mucin, parapeptone, nor urates are precipitated by heat. Picric acid, ferrocyanide of potassium, or the mercuric tests may then be used as confirmatory.

Passing on to the tests for sugar, we are inclined to think that Dr. GEORGE JOHNSON'S application of picric acid with liquor potassæ for the detection of this substance in urine is likely to be widely adopted for clinical purposes, especially his method for quantitative determination. His valuable communication on this subject to the Clinical Society has not had full justice done it, owing no doubt to the controversy raised with regard to the action of picric acid in albuminous urines. Dr JOHNSON'S saccharimeter is an exceedingly neat instrument, and the determination can be rapidly effected. We know of no process so speedy and convenient, whilst there is no doubt that its results are trustworthy. It is just the process for work in the wards, since it can be carried out then and there at the bedside of the patient, without having to refer the urine to the chemical laboratory, or to wait twenty-four hours, as is the case with the fermentation process. Dr. OLIVER'S application of the indigo carmine test is likely to prove useful to the busy practitioner at the bedside, though for reasons dwelt upon recently it cannot be relied upon as proving beyond doubt the presence of glucose, since it gives reactions with all the carbohydrates. In all cases, therefore, it would be necessary to determine the nature of the carbohydrate by means of the copper test.

In conclusion, we venture to hope that the discussions these various tests have given rise to will create an interest in that hitherto much neglected branch of medical science—pathological chemistry. PARACELSUS ridiculed the physicians of his time for remaining content with the mere inspection of the urines of the sick, and for making no attempt to become acquainted with their real nature by submitting them to analysis; but the present generation have been as negligent as their predecessors, since they have not only not availed themselves of much of the really good work already done in this direction, but are apparently ignorant that such work has been done. For its own credit we hope that the report of the Committee of the Clinical Society, even if it can add nothing fresh, will do full justice to the past work in this field, and also clearly indicate the lines of future research.

THE opening of the Parkes Museum in its new home in Margaret-street, Cavendish-square, by H.R.H. the Duke of ALBANY is an event which cannot but have considerable influence on the practical study of hygiene in this country. That a Royal Duke should take upon himself the Presidency of such an institution is in itself a fact of good omen, and the thoughtful speech which was delivered by his Royal Highness on the occasion seems to show that he has the objects of the Parkes Museum really at heart, and that he is ready to further those objects by his influence and advocacy. The truth of the paragraphs in the Prince's speech which dealt with the subject of faulty house construction will be acknowledged by all readers of THE LANCET, in which week after week is told the tale of disease or death following on the heels of ignorance. "The experiences of my own family in this matter," said the Duke "have been singularly hard." Had the speaker thought fit to amplify this statement, he might have reminded his hearers how the lives of the Prince Consort and the Princess ALICE had both been presumably sacrificed to sewer-gas, how the Prince of WALES, the Duke of EDINBURGH, and himself had been brought almost to death's door by typhoid fever, how the young Duchess of CONNAUGHT nearly succumbed to sewer-gas in a newly built palace, and how his own house at Claremont has been in times past suspiciously fatal to two illustrious Princesses who encountered the perils of childbirth within its walls. When those who dwell in palaces have experiences such as these, no one can say that the objective lessons to be found in the Parkes Museum are not a national necessity.

The Museum is likely, we believe, to be of as much service to the medical and architectural professions as to the public at large. Many of the things exhibited are of a technical character, and convey but little to the eyes of the ignorant. The Museum is intended to serve as a field for demonstrations by professed sanitarians for the instruction of those who are anxious to learn. We are glad to hear that all the teachers and professors of hygiene in the medical schools of London have become members of the Museum, with the object of using it for the instruction of their pupils. It is absolutely necessary that medical officers of health should have some *practical* knowledge of the objects exhibited in the Parkes Museum, and as it is not possible for every medical school in London to have a hygienic museum of its own, this central museum, accessible to all, will be a great boon, and seems to be a step in the direction of that centralisation of teaching of which we have heard so much.

We are particularly glad to notice one paragraph in the President's speech which doubtless was not inserted without due thought. Alluding to the size of the Museum, his Royal Highness stated his belief that it was amply big enough for its purpose, and that the object of the Council was to have a comparatively small collection representative of hygienic *principles*, rather than a heterogeneous collection *representing details*, for which, as he very truly said, the largest building would soon become inadequate. We feel sure that "small and select" is the motto which the Council of the Museum must work by. If the articles in the Museum are selected only for their merits, and if the weeding of the collection is carried out from time to time absolutely without personal considerations, the Museum will be really an educational establishment, and not a mere show-room for enterprising tradesmen. That the present Council of the Museum is striving its utmost to make the Museum a centre for valuable and serious teaching, there can be no doubt, and a perusal of the report of Captain GALTON will show that the members of Council are working individually, and that each is giving his quota of thought and time to the enterprise which they have in hand. The names of the gentlemen who at present constitute the Council are such as to command the confidence of their professional brethren, and we doubt not that the Parkes Museum will meet with ungrudging support from the two great professions which it is especially designed to serve.

Of the great value of the library and reading-room there can be no two opinions. The literature of sanitation is growing by leaps and bounds, and a place for the storing and keeping of it in a position where it is readily accessible has become an absolute necessity of the time. We are glad to find that the Council has not been slow to issue its first programme of lectures for the summer session 1883. These lectures were inaugurated by Professor DE CHAUMONT on June 1st, who will be followed on June 7th by Dr. STEELE, of Guy's Hospital, who takes for his subject, "The Management of the Sick Room," and on June 13th by Professor HAYTER LEWIS on "The Employment of Artistic Materials in the Architecture of Houses and Hospitals." Dr. CORFIELD will discuss "The Sanitary Defects of Houses" on June 14th, and Mr. ROBERT RAWLINSON, whose labours in the cause of sanitation during the Crimean War are remembered by many of our readers, will lecture on the burning question of "The Hygiene of Armies in the Field," on June 21st. Mr. ROBINS will lecture on "Hospital Construction" on June 28th; Mr. ROGERS FIELD will give a lecture and demonstration on "The Sanitary Arrangements of the Parkes Museum," on July 1st; Dr. RALFE will lecture on "The Hygiene of Schools," on July 12th; and Captain DOUGLAS GALTON will bring the brief first session to a close on July 19th, with a discourse on "The relationship of Artificial Lighting to Ventilation." Such lectures as these must aid in the dissemination of sanitary knowledge, and we congratulate the Council of the Parkes Museum for showing their earnestness in so prompt and practical a manner.

IN the article in our last issue on the objections to the hygienic value of the Contagious Diseases Acts, we showed that the gain in the health and efficiency of the soldiers in the protected districts was a very decided and important one, and that the leading statement in the report of the minority of the Select Committee, "that venereal disease in the Home Army has not substantially diminished in the stations protected by the Acts to a greater comparative extent than in those not under the Acts," could not be substantiated on a fair and honest consideration of the statistics. The gain was proved by comparing years when no legislation existed—1860 to 1863—with years when the compulsory clauses were in full operation—1870 to 1873,—by contrasting the years 1861 to 1866 with 1867 to 1872, and by showing how marked and immediate a fall took place in every district in succession when the Acts were extended to it. This improvement is admitted even by the Parliamentary

advocates for the repeal of the compulsory clauses, for they say, in referring to the period before Lord CARDWELL'S order stopping the pay of a soldier with venereal disease was made, "there was a further reduction of disease, both regular and continuous, until the last year of the series"—and this is only an increase of 3 per 1000—"in the subjected stations, contemporaneously with an ultimate fall after intermediate fluctuations in the unsubjected districts"; and then they add that "in the final period 1873 to 1878 the same characteristics are observable." (Minority Report, p. 6.) The figures in our former articles, and Inspector-General LAWSON'S diagram in the Report for 1881, will show how much is granted and how much is concealed by these apparently simple admissions. The marked fluctuations in the unsubjected stations, an increase in every year in their ratios of admissions over subjected stations, varying from 24 to 40 per 1000, the persistently higher average of soldiers in hospital daily suffering from primary venereal sores, and a fall from 1866, when the numbers were practically the same in both sets of districts, to 50 in the one group against 81 in the other in 1873, or 35 against 68 in 1877, are hidden behind these statements. In 1878 the calling out of the Reserves at once showed the improvement in the sanitary condition of the protected over the unprotected districts, for in the former the hospital admissions only increased 5 per 1000, whilst in the latter they rose to 20 per 1000. In every way, therefore, that the army statistics are taken, they show a marked reduction in primary venereal disease during the period in which the compulsory clauses have been in force. A further proof of their efficiency is afforded by the most recent returns. In 1879 Lord CARDWELL'S order was cancelled, and the true amount of the disease in the army again became apparent, but whilst the ratios of hospital admissions per 1000 in 1880 increased in fourteen large stations not under the Acts to 167, and in all the unsubjected districts to 119, in the fourteen protected stations they only amounted to 74. The number of constantly sick in the fourteen free stations rose at a proportion nearly double that in the latter. In 1881 the protected stations show no increase in the admissions for primary syphilis, whilst in the other fourteen large military stations a still further rise of 14 per 1000 is shown. The diminution in the number of primary venereal sores in the protected districts must convince everyone, who is not so prejudiced against the Acts on other grounds, that he cannot dispassionately weigh the statistics at their hygienic value.

This improvement, calculated at from 5 to 8 men per 1000 in daily efficiency, is not due to a general abatement throughout the garrison towns, for in that case a corresponding and uniform improvement would have been shown in the unsubjected stations, whereas in the first six years of compulsory legislation their decrease in admissions was only at the rate of 9·4 per 1000. A general abatement is again disproved by the rise in 1880 and 1881 in these districts, and by the immediate reduction in every subjected place when the Acts came into full working order, and no other factor of importance can be adduced for this decline. Great stress is laid by the opponents of the Acts on the fall in the subjected districts prior to the compulsory legislation; but it is not stated that this fall is deduced from a mere aggregate, and if the districts are taken individually, and each one separately examined, no one station can be found with a regular decrease year by year before the enforcing of the Acts, but marked fluctuations are in every case noticed. It cannot therefore be fairly compared with the steady and continuous improvement, either collectively or in individual places, that has taken place since the extension of the Acts to a given district. The differences between the high and fluctuating rate of disease in the years before the adoption of the compulsory provisions of the Acts and the steady decline since, are well shown by the following figures of the constantly sick from primary sores:—From 1860 to 1867 the average numbers for Woolwich were 95, 53, 54, 29, 40, 23, 35, and 44; since then 31 and 32 were reached in 1871 and 1872; but in other years they have varied from 20 to 25, even down to 18, 14, and 15, in 1876, 1877, and 1878. At Colchester the numbers up to 1869 were 32, 22, 14, 15, 15, 16, 28, 23, and 25; and since that year we find 14, 5, 4, 9, 6, 2, 3, 5, 5, and 4. If we take for comparison Dublin, with its State-supported but voluntary lock hospital, we find from 1860 to 1866 the following figures: 68, 53, 44, 58, 52, and 38; and from 1867 to 1873, 52, 55, 65, 51, 40, 75, 52; and then from the date of Lord CARDWELL'S order, 29, 20, 18, 26, and 52. The ratios per 1000 also prove conclusively the same fact. The following ratios per 1000 give the admissions at some of the unsubjected stations for primary sores in 1880, and in no case has the average strength at either of these stations during the year amounted to 1000 men: Warley, 67; Hounslow, 117; Pembroke Dock, 64; Sheffield, 154; Manchester, 232; Preston, 98; Fermoy, 94; Limerick, 62; Athlone, 49; Belfast, 273. Almost all these ratios except Athlone are higher than those in any subjected district except Windsor and the Curragh, and four of them exceed these. Dover has the same ratio as Athlone, whilst Colchester, Winchester, and Maidstone are lower. Where, in the face of these figures, is the evidence of the general abatement throughout the country of which the advocates for repeal make so much? Not only is there no abatement in the garrison towns not under the Acts, but the statistics of Mr. F. W. LOWNDES—642 patients in the Liverpool Lock Hospital in 1881, against about 400 in 1865, 1866, and 1867—conclusively show that such an assumption is quite unjustifiable and unfair, and that it is only invented to endeavour to explain away the proven advantages of the Acts in the districts where they are in force. Dublin has a Lock Hospital supported by a State grant of about £2600 per annum; from 700 to 900 patients, of whom 60 per cent. are habitual prostitutes, are admitted on the voluntary system, and as a result of long experience Mr. RAWDON MACNAMARA most positively stated in evidence that the voluntary system in Dublin was a failure. Since his evidence was given we find that in 1880 216 soldiers per 1000—940 out of an annual strength of 4357—were admitted to hospital for primary syphilis. How can the voluntary system be urged when we have such statistics as these before us, and can we wonder that military authorities in Dublin have made an appeal for the extension of compulsory legislation to that city? There is no true basis, therefore, for the assumption in the Minority Report (p. 15), "that in the stations under the Acts the average rate of diminution in the preceding period would have continued subsequently inde-

pendently of the Acts;" for, taking the stations separately, there is no average rate of diminution at any one of them previous to the enforcement of the Acts. We think that it would still have fluctuated as it did before, and probably have retrograded, as Inspector-General LAWSON contended. This is shown most clearly by examining the statistics of primary sores in the unsubjected stations, for they show no steady contemporaneous decrease, and the reports for 1880 and 1881 even give a marked increase.

The returns from Aldershot and Shorncliffe, our chief military camps, are often quoted as showing that the Acts have been of no value at those stations, and are therefore useless for the purpose of reducing disease among our soldiers. The average number of the constantly sick shows a great and unexplained fall in the years 1866 and 1867—viz., from 81 to 54 and 45 at Aldershot, and from 15 to 9 and 8 at Shorncliffe; and by including these exceptional years most erroneous inferences have been drawn as to the effect of the Acts. It had again risen to 15 at Shorncliffe in 1868—i.e., before the compulsory clauses had been sufficiently long in operation there to affect the amount of disease to any extent, for they were only applied at the end of July of that year; whilst in 1869 it fell to 10, and this was followed by a successive decrease to 6 and 7, and in 1873 to 4, when the stoppage of pay for primary syphilis and gonorrhœa came into effect. Even at Aldershot the ratios after the Acts are steadily below those of the years preceding them; and we cannot therefore agree with the advocates for repeal when we thoroughly examine the data, even at the stations where they say that the Acts have proved a conspicuous failure. The statement in the minority report that the improvement is "only in the one particular of 'non-syphilitic' sores" is based on no valid argument whatever, and is evidently only put forward to minimise the advantages of the Acts.

We have most carefully and exhaustively considered the statistics bearing on the Acts which have been produced by the official witnesses, by the supporters, and by the opponents of the Acts, and we have come to the conclusion that they have been of great hygienic value, and that this is almost entirely due to the compulsory clauses. We are sure that, having regard to the welfare of the community, a mistake has been committed, and that the sanitary and social advantages of the Acts justified their being enforced. Instead of repealing the compulsory clauses, Parliament would have improved the health of the army if the Acts had been extended to other stations, such as Dublin, Belfast, Edinburgh, Manchester, Preston, Sheffield, and Hounslow, even if the difficulty of including London had been insuperable.

AN important series of experimental investigations having practical bearings has been contributed to the *Lyon Médical* by ARLOING, CORNEVIN, and THOMAS. These observers arrive at the conclusion that certain forms of virus have their own way of reacting to various destructive agencies, so that without previous experiment it could not be predicted that this or that virus will be more or less affected by a given noxious reagent. The present course of investigations was made on the bacillus anthracis; the best virus was considered to be that extract obtained by powdering and squeezing the fragments of the symptomatic swellings of charbon, which had been treated with half their weight of pure water. This preparation contained microbes in the form of mobile rods, with or without free spores, and could be preserved fresh for some days if the external temperature were low, whilst if dried it remained active for two years, no matter what the temperature of the laboratory might be. The authors have found, in conformity with previous conclusions, that dried virus was more resistant to destruction than fresh material; that the virulence of the agency is not necessarily related to the mobility of the organisms, for thymol and oil of eucalyptus are capable of attenuating the virus in forty-eight hours, without destroying the activity of the proper motion of the microbes. When the above-mentioned preparation was allowed to stand, it separated into two layers. The upper contained no organisms, effectual results were only got when inoculations were made with the lower layer. In certain cases no putrefaction occurred, even after the lapse of seven months, so that the symptoms observed in inoculated animals were not due to septicæmia. The juice of muscular tissue diluted with water did not preserve intact the virulence of the virus—this nutritive medium was therefore one mode of effecting attenuation. The rapidity, however, with which attenuation was effected varied; in some cases the virus had actually lost its virulence at the end of five days; other specimens continued active even after the lapse of eight, nine, or ten days. The power of the poison remained unaffected, notwithstanding exposure for three days to a degree of cold equal to that met with in the severest weather of the winter of 1880–81. The experiments made by submitting the organisms to various degrees of heat were varied and numerous; in their general outline they are corroborative of the conclusions drawn from his investigations by M. CHAUVEAU, an account of which we presented to our readers in THE LANCET, (vol. i. 1883, p. 691). When fresh virus was heated in sealed vessels to a temperature below 65° C., for ten to thirty minutes there was no modification of its activity—i.e., inoculations performed on guinea-pigs produced positive and and rapid results. When the same virus was exposed to a degree of heat above 65° C., but below 100° C., the damage to the pathogenic activity of the organisms was more or less marked, according to the duration of the heat; the virus was rendered totally harmless if the heat were sufficiently prolonged. Inoculations performed on a series of guinea-pigs of the same age, size, and sex (important points in experimental pathology, if they can be carried out), with the virus which had been heated to 65° C., for different amounts of time (fifteen, twenty, thirty, forty, and seventy minutes) were all successful in killing the animals at periods varying from twelve to forty hours after inoculation in an order which precisely corresponded to the duration of the exposure of the virus to the heat. When fresh virus was heated for two hours at 80° C., or for twenty minutes at 100° C., all pathogenic properties were lost. The same result was obtained at the end of two minutes if a tube containing the material were immersed in boiling water—an interesting occurrence, which was probably to be explained by the fact that impure water boils at a temperature above 100° C., whilst the conductivity of water is also greater than that of air, which was the medium in the other experiments. Curiously, the addition of three volumes of boiling water to

one of fresh virus left totally unaltered its pathogenic capacity. When the virus was desiccated a temperature of 85° C. for six hours was necessary to bring about a sensible attenuation of the activity of the virus; and a temperature of 110° C. for the same time was required for complete destruction of the pathogenic property. The authors have succeeded in preparing from the dried material, by submitting it to temperatures between 85° C. and 100° C., a series of attenuated preparations, by the aid of which preventive vaccinations were crowned with complete success. Dried virus required to be kept for two hours instead of two minutes in boiling water, in order to completely destroy its virulence.

The study of the bacterial poison in connexion with various reputed antiseptics is of much practical interest. To make comparisons between the various antiseptic agencies, their action was always allowed to go on for forty-eight hours, and five drops of the virus thus obtained were invariably the amount inoculated in animals to test the alteration of its activity. The difference between the degree of resistance of the fresh and dried virus was in this manner rendered very clearly. Out of fifty substances employed, thirty were powerful enough to destroy the pathogenic property of fresh virus, whilst only nine were capable of doing this with dried virus. Watery solution of carbolic acid 2 per 100, salicylic acid and nitrate of silver 1 per 1000, sulphate of copper and boracic acid 1 in 5, corrosive sublimate 1 in 5000, hydrochloric acid 1 in 2, saturated solution of salicylic acid in alcohol and the vapour of bromine, destroyed both the fresh and dried virus; watery solution of permanganate of potash 1 in 20, of chloral 3 in 100, of acetate of alumina 1 in 200, of benzoic acid 2 in 100, &c., only destroy the fresh virus. The authors were surprised to find that alcohol at 90° C., saturated alcoholic solution of camphor, the salts of ammonia, borate of soda, tannic acid, gaseous sulphurous acid, and many other substances, did not destroy the virulence of the poison after contact for forty-eight hours. These conclusions are remarkable. It would appear that we are quite unable to predict from previous knowledge of the chemical power of various agencies whether such agencies will prove as powerful in destroying bacteria as we might with some reason anticipate. For example, it will be seen that a very dilute solution of corrosive sublimate seems to be quite as effectual as a strong one of hydrochloric acid. It was the above results which led the authors to make the statement already alluded to concerning the peculiar mode of reaction of certain kinds of virus to various agencies. Again, a strong caustic like chloride of zinc may fail as a means of destruction when the vapour of thymol may succeed. Many experiments made with fresh and strong preparations of peroxide of hydrogen failed to substantiate those made by MM. BEST, REGNARD, NOCARD, and MOLLEREAU. ARLOING found that oxygenated water capable of setting free ten volumes of oxygen on decomposition was no more able to modify the activity of the charbon virus than ordinary water after contacts varying from four to ninety-six hours. The above researches are of great suggestiveness; they seem to point to a way out of the difficulties which surround the treatment of persons already the subjects of infectious diseases. The destructibility of the activity of bacteria once introduced into the animal organism, either by attenuation or complete annihilation, if such be possible, has until recently appeared to be altogether beyond our ken, from the simple notion that it was to be feared that agencies capable of effecting their modification could only act at the price of at least corresponding damage to the tissues of the animal affected. These latest experiments hold out a hope that our therapeutical measures may not always be in vain, and even that apparently trivial means may in this regard be as powerful as seemingly more efficient methods. It would seem that here, as elsewhere, knowledge may be more powerful than power. Further, the proper protoplasm of animal bodies in one way or other by some of the various processes originating in it, may be in an apparently accidental manner really the efficient cause of the termination of acute infectious diseases, either by introducing the necessary factor for the complete attenuation of the acting virus, or by lending support to the activity of the poison. In some such way the considerations arising from these recent researches may lend a helping hand in the elucidation of many important pathological processes.

THE eternity of corporations is an article of belief with all persons who have once tasted the sweets of office. They cannot understand that corporations, like "systems," should "have their day, and cease to be." Their continuance may be an anachronism; it may be an injustice; all the reasons for their existence may have lapsed; there may be sixteen too many of them. But to blot out one of them, or to allow it quietly to retire from duties to which it is no longer adapted!—the very suggestion is treason, and to the official mind seems to imperil the constitution if not the universe itself. We have no understanding of this view of corporations. The particular case which has been brought under the notice of Mr. MUNDELLA, in the shape of an appeal from the judgment of the House of Lords, does not affect our mind with any worshipful or conservative feeling. We admit that the Apothecaries' Company has done good work in its day. When the College of Surgeons took no notice of medicine, and still less of medicines and of midwifery, the Blackfriars Society gave reasonable attention to all these subjects, and so complemented a most defective examination. It did this work when other bodies either could not or would not do it. In so doing it fulfilled a useful function for half a century. And for doing so it has had its reward It was respected as a useful body, and it received large sums of money for the work it did. Now other corporations, more strictly medical and professional in character, are doing the work that the Act of 1815 devolved on the Apothecaries' Company in default of other corporations. But, strange to say, we are asked to perpetuate this Society as an examining body on the ground of what it has done in the past. The demand is unreasonable. Past services do not justify an examining body in claiming a perpetual tax from the profession. The Society loses nothing by being disestablished as an examining body, for it is fair to say that it has, as far as we know, generally expended over examiners and examinations what it has received in the shape of examining fees. But even if this be so, if the Society is no longer required in the system of things, it is absurd to say that it must be maintained out of the pockets of the profession in perpetuity. It is undeniable that the demand for the licence

of Apothecaries' Companies is on the decline. The Report of the Commissioners and the Bill of the Government, though not courageous enough to propose the immediate extinction of the Apothecaries' Society, both contemplated its death from inanition—a process which, it is understood, will take a few years, but not many. In our judgment it is more dignified both to the Apothecaries' Societies and to other bodies to anticipate this process, and release them speedily by Act of Parliament. But some men will say, Destroy a corporation by Act of Parliament! Can any power be so fit to discontinue a corporation as that which created it? Does it ever occur to those who are so shocked at the idea of losing the Apothecaries' Company or the Faculty of Glasgow by Act of Parliament that the Bill of the Government destroys at a stroke the Medical Council and the Branch Councils? And the Medical Council is a corporation. It is really time to be reasonable, and to insist that no false reverence shall save bodies that are no longer needed. When a Conservative leader like Lord SALISBURY sees his way to part with corporations, their *raison d'être* must indeed be gone.

Annotations.

"Ne quid nimis."

THE PRIMARY FELLOWSHIP.

AT most of the Schools, both in the metropolis and in the provinces, a feeling of dissatisfaction, amounting almost to indignation, prevails at the results of the recent Primary Examination for the Fellowship of the Royal College of Surgeons of England. From every quarter come protests and complaints that many able, industrious, and accomplished students have been rejected; and, still worse, more than one teacher has alleged that while some of his best pupils have failed, inferior ones have managed to pass. Thus the old grievance at the College examinations is perpetuated. Uncertainty, rather than severity, is their common characteristic. Opinions are unanimous that on this occasion the written questions in anatomy were, out of all proportion to the requirements, complicated and difficult. It has been affirmed, and we are ready to endorse the statement, that when the antecedents and status of the anatomical examiners are considered, not one of these examiners could have written offhand an intelligible answer to at least two of the four questions. The first part of the third question is fair enough; but to answer the second part, "Trace their [the various inflections of the peritoneum] formation from early fœtal life to their complete development," would require at least as much time as that allowed for the whole examination. Further, whoever of the examiners may have been responsible for the fourth question, we are quite confident that he could not himself have written an answer to it satisfactory to any competent person. "Explain," asks this would-be comparative anatomist, "the general plan of construction of the human skull. Give the typical component parts of each bone as displayed in the course of development and represented as permanent bones in the skulls of lower animals, and point out the features in man's skull which are essentially human." (See page 985.) We are loth to canvass the competence of the examiners individually or collectively; but if they are so devoid of common sagacity as to set questions in departments of knowledge altogether beyond the range of their own studies, they must not be surprised if unpleasant comments and criticisms are passed upon them. Speaking for ourselves, we have always advocated a very high standard for the Fellowship examination, partly because this diploma is regarded as the highest test of a surgeon's knowledge and attainments, and partly to emphasise its superiority over its "bogus" pseudonym obtainable by purchase in Edinburgh. The matter calls for an inquiry by the Council at its next meeting.

THE INDIAN MEDICAL SERVICE.

THE grievance of the junior officers of the Indian Medica Service, that so many of them are in receipt of what is absurdly termed "unemployed pay," was brought under the notice of the House of Commons by Mr. Leamy on Monday last. Mr. Cross explained that this arose from two causes, the unusually small number of medical officers at present on furlough, and the recent reduction of twenty-two native regiments, with the consequent diminution of the medical staff attached. He stated that the "unemployed" pay of a surgeon was not the lowest of any covenanted or commissioned officer in the Indian Service, as implied in Mr. Leamy's question, an unemployed lieutenant drawing thirty rupees a month less. But Mr. Cross must surely be aware that a surgeon has the relative rank of captain, not of lieutenant, and with that grade therefore the comparison should have been made. Although it is true, as Mr. Cross stated, that the published conditions under which officers accept employment in the Indian Medical Service are accurately fulfilled, this does not remove the hardship arising from a great increase in the number on "unemployed pay," in consequence of changes introduced subsequently to these officers having joined the service. Surely, in common justice, some steps should be taken to compensate these officers for the loss they sustain under such circumstances.

THE ISOLATION OF SMALL-POX.

AT their last meeting, the Metropolitan Asylums Board took their first step towards giving effect to the recommendations of the Hospital Commission, in so far as the isolation of small-pox is concerned, by deciding to purchase the twin-ship *Castalia*, which was originally built for the Channel passage traffic, but which was abandoned for this purpose on account of her slowness. The vessel, which cost £70,000 to construct, will, subject to the approval of the Local Government Board, be purchased for £5500, and she will be moored near to the present hospital-ship *Atlas*, in order that the administrative ship *Endymion* may suffice for the purposes of the two vessels; and it is stated that in this way additional accommodation will be provided for 150 patients. This, together with the 100 beds in the *Atlas*, will give accommodation for as many as 250 small-pox patients, and in view of the Fulham experience we cannot but regard the experiment as of a serious nature. At Fulham the effect of aggregating small-pox patients was felt at distances far in excess of the area of water by which these vessels will be surrounded, and we can hardly imagine that, though, on one side at least, a large portion of the river intervenes between the vessels and the houses on shore, the circumstances will be so different as to prevent a result similar to that which befell the neighbourhood around Fulham in 1881. At Darenth a large plot of land has been purchased for the purposes of providing for convalescents from small-pox, and it must therefore be inferred that the provision to be made both in London itself and on the river has reference to the acute cases. Now, Mr. Power's report on Fulham went clearly to show that it was the aggregation of acute cases, and not of convalescents, that was associated with the spread of the disease to the community around; and if these acute cases, which are now recognised as being specially poten for mischief, are to be more than ever concentrated together,

it appears to us that such concentration should not take place in the neighbourhood of dwellings, even though some area of water may intervene. The facilities for securing ample movement of air about hospital buildings are obviously greater in the case of a ship than of a hospital on shore; but the advantages thus secured can hardly be regarded as counterbalancing the disadvantages attendant upon the massing together of large numbers of acute small-pox cases. We look upon the future experience as to the isolation of this disease with more than misgiving.

THE HOME SECRETARY AND THE CONTAGIOUS DISEASES ACTS.

ON the 25th ult. a deputation from Chatham, joined by some gentlemen from Devonport, Plymouth, and Portsmouth, waited on the Home Secretary, and impressed on him the evils that would ensue in the various towns now under the Acts if the effective clauses were abandoned. A still more representative deputation, to which this was only a preliminary, will lay their views before the Home Secretary at a future date. The Home Secretary is evidently of opinion that the Acts are desirable, both from a sanitary and a social standpoint, and he stated that he was quite satisfied that the towns where these Acts had been in force were convinced of the benefits derived from the Acts, and were strongly in favour of them. Yet Sir William Harcourt could only ask a deputation in support of compulsory examination to suggest something starting from the point of view that this examination could not be retained. Would it not be more pertinent to put such a question to the gentleman who moved the abolition of compulsory examination, and to those who supported him by vote and by petition, in entire disregard of the views and opinions of the authorities and inhabitants of the towns in which the Acts were in full operation? The possibility pointed out by the Home Secretary, that women would come voluntarily to the hospital, has been already tried, as he might have known, and has everywhere failed. Since the repeal of the compulsory clause it is again being tried, and the effect is clearly enough shown already in Plymouth, as stated by a member at the meeting of the Town Council on the 23rd ult. From thirty to forty diseased women are known to have been spreading disease during the past month, and they cannot be induced to go to the hospital. If the statement in an evening contemporary be true, Mr. Hopwood proposes to strike out of the Estimates all the money formerly voted for the purposes of the Acts, and so the towns will not only be permitted to return to their old disgraceful state, but, if he be successful, the very hospitals, with their work of mercy to the poor creatures themselves, who might be admitted and healed, and in many cases reclaimed, will be shut up for want of the necessary funds for their support. We see no evidence of any intention on the part of the opponents of the Acts to step in and offer any substitute for the 645 beds now supported by a State grant, or to open voluntary Lock Hospital wards elsewhere throughout the country.

SCARLET FEVER AND HOSPITAL ISOLATION.

A TABLE in the Registrar-General's Annual Summary for 1882, relating to London and other large English towns, supplies statistics which afford apparently conclusive evidence of the value of the isolation afforded by the hospitals of the Metropolitan Asylums Board as a means of controlling scarlet fever mortality. This table shows the rate of mortality in London from each of the principal zymotic diseases in each of the forty-five years 1838–82. Prior to 1858 the mortality statistics of scarlet fever and diphtheria were not separated, so that the mortality from scarlet fever is only given for the twenty-four years ending 1882, although the combined figures for scarlet fever and diphtheria are available back to 1838. We may divide this period of twenty-four years into two groups of twelve years, in the first of which there was practically no attempt to isolate scarlet fever in hospitals, whereas in the second the hospital accommodation of the Metropolitan Asylums Board afforded a constantly increasing amount of hospital space for isolation and treatment. The annual death-rate from scarlet fever in London exceeded 1 per 1000 in six of the twelve years in the first group, and averaged 1·11 per 1000, whereas in the second group of twelve years the annual rate only once touched 1 per 1000, and did not average more than 0·59 per 1000. In point of fact we may say that the mean death-rate from scarlet fever in London during the last twelve years, under the operation of the Metropolitan Asylum Hospital system, has not been more than half the rate that prevailed in the twelve preceding years, when no such hospital accommodation prevailed. Those who may hesitate to attribute this halving of the fatal scourge of scarlet fever in London to the effect of hospital isolation will probably assert, like anti-vaccinationists, that much of this reduction of zymotic mortality in London and elsewhere is due to generally improved sanitary conditions. To such we would point out that the mortality from measles and whooping-cough, for which hospital isolation is practically untried, was almost identically the same in the two periods of twelve years with which we have been dealing.

VESSELS AND NERVES.

THE nervous system dominates not only the physiology but also the pathology of the highest animal organisms. This fact is a corollary to at least two important principles—the indivisibility of physiology and pathology, and the supreme importance of the neural tissue in all the superior classes of animals. The truth and the value of these considerations can receive no better illustration than the all-powerful influence of the neural apparatus in the production of disease of the various tissues. A most careful and valuable series of experimental researches on the influence of the nervous system in the causation of disease of the vessels has been contributed to the current number of Virchow's *Archiv* by Dr. Lewaschew of St. Petersburg. The conclusions at which this experimenter arrives are definite, and correspondingly easy of comprehension, especially in the light of what we already know concerning the origin of tissue changes as the result of neurotic lesions. The method of investigation is worthy of mention. Generally the chief nerve trunks of the hinder extremities of dogs were the parts subject to irritation by means of a solution of muriatic or sulphuric acid; it was found that rabbits and cats were unfit for this continuous form of stimulation, because the action of the acid on the exposed nerve trunk brought about gangrene; as a strong stimulus was wanted, milder means could not be employed. The observer then noted chiefly the vaso-motorial changes which ensued. But the most important part of the research consisted in the examination of the various vessels which received their nerve supply from branches of the irritated nerve trunk. The most satisfactory results were obtained from the sections hardened in picric acid and stained with logwood. The alterations were most advanced in the smaller vessels—in those provided with a good coat of muscular tissue. The duration of the constant irritation was variable, some animals being examined after a few months, whilst others lived for a year and a half or more. The microscopical examination of the vessels of the limb experimented on was compared with that of those of the other limb, which had been under precisely the same conditions, with the exception of the special form of irritation. No change was detected in the unirritated limb. It must first be mentioned that the pathological changes

found in the vessels of the limb operated upon were not equally distributed over all parts of the vessel, but the areas of disease, of varying size, were separated by areas of sound tissue. The investigation of the arteries of animals in which the sciatic nerve had been stimulated a moderately short time, or in the least affected vessels of those animals in which the stimulation had endured for a lengthened period, resulted in the detection of alterations chiefly of the adventitious coat. New formation of vessels, with the presence around them of a great number of indifferent cells, was observed; and this process was seen to extend itself more or less into the muscular tissue, whereby the bundles of plain muscular tissue were separated from one another. In vessels which had been irritated for much longer periods, a development of connective tissue which had undergone fibrillation and had displaced and destroyed the middle coat was witnessed. In brief, the changes detected were those of periarteritis, mesarteritis, and endarteritis, in the order here mentioned. Such inflammatory alterations are of great importance in the production of aneurisms, and the bearing of these recent experiments on vascular pathology is too evident to need a long description. The ascertained relation between the pathological processes in nerves and the diseases of the vessels suggests an explanation of the frequent disease of the cerebral vessels. The similarity of the lesions described above to those which have been delineated by various histologists need not lead to the conclusion that *all* fibroid vascular diseases are the result of nerve irritation; it must ever be borne in mind that a variety of causes may produce identical results.

THE WATER-SUPPLY OF THE METROPOLIS.

ACCORDING to the report upon the quality of the water supplied by the Metropolitan Water Companies during April, recently published, the supply was, for river water, "unusually free from organic matter." Colonel Frank Bolton calls attention to the clause of the Board of Trade regulations (1872), which provides that no overflow or waste pipe other than a "warning pipe" shall be attached to any cistern supplied with water by a company. The particular object of this regulation is to prevent the waste of water, but, as Colonel Bolton observes, if the overflow pipe is brought outside the house and the end left exposed to the air, instead of, as is frequently the case, being carried into the drain, it will effect an object of far greater importance, by getting rid of the poisonous effluvia and gases from the drains, which would otherwise ascend through the pipe, and not only be partly absorbed by the water in the cistern, but be partly mixed with the air in the houses, thereby becoming a cause of disease. Attention is also directed to the great importance of cleansing and flushing the cisterns, as, if this precaution is omitted, the water, however pure when supplied, cannot fail to deteriorate.

DEATH OF DR. H. B. WILBUR.

THE death is announced of Dr. H. B. Wilbur, for upwards of thirty years Superintendent of the New York State Idiot Asylum at Syracuse. Dr. Wilbur was one of the pioneers in America of the work of ameliorating the condition of idiots, and has always been regarded as an authority in all that relates to the care and treatment of this unfortunate class. A sound physician, a careful administrator, and a man of excellent judgment, his death from heart disease, on May 1st, at the comparatively early age of sixty-two, will be deeply felt by a large circle of friends in Europe as well as in America. Dr. Wilbur was the author of an able article on Idiocy in Johnson's Encyclopædia, and of several monographs relating to the treatment of imbeciles and the insane.

NFANTICIDE.

THE late Mr. Wakley used to assert that the number of infants murdered in the metropolis in the course of a year must be counted in hundreds which could not be told on the fingers. His estimate may have been too large, but the position he held as coroner gave him opportunities of forming an opinion that could not be put aside without a large amount of counter-evidence, which certainly was not forthcoming. We greatly fear that a very large proportion of the deaths of children only a few months old must be classed as avoidable. When it is not desired that an infant shall live, nothing is easier than to let it die. We know, for example, that a large percentage of the children who die by what is called "overlaying," or who are, in other words, suffocated by their parents in bed, come by their deaths because their parents are drunk. In short, they are distinctly "killed," but the killing is not called murder because those who do the deed happen to be intoxicated, or—which is the same thing—are supposed to be so. We cannot help thinking that the leniency commonly shown in these cases is mischievous; it tends to multiply crimes of this class, and it cheapens human life in the eyes of the humbler orders of the people. We should like to find a few of these cases sent for trial on the charge of manslaughter, at least. The mere fact of so sending them would act as a deterrent to those who, being anxious to get rid of an infant who may chance to be an encumbrance, pretend to a certain amount of affection for it, but nevertheless "overlay" it in a fit of pretended drunkenness, much to their secret gratification. Coroners and juries are too tender-hearted in dealing with the parents of young children who come by their deaths by a neglect which is the result of indifference, or something worse. Of late a practice seems to have sprung up of packing undesired infants in parcels and leaving them to their fate. This is a form of brutality which ought to be visited with all the severity of the law. It is, however, to be feared that even this mode of "doing children to death" will not be treated as it deserves. Infanticide is a grave social crime, but it is one that modern opinion is wont to regard with inexplicable complacency.

NEPHRECTOMY.

IN connexion with the subject of nephrectomy, which occupied the attention of the Royal Medical and Chirurgical Society at its last meeting, we note that an interesting case (the sequel of which has yet to come) was brought forward at the meeting of the Berlin Medical Society on the 9th ult., when Dr. Israel exhibited the pyonephrotic kidney, which he had excised the day before, from a young woman twenty-one years of age. The patient's symptoms dated back some months, and as early as last October she complained of a sense of tension in the left side of the abdomen, and of passing turbid urine. Professor Leyden saw the case in consultation with Dr. Levy, and they detected a tumour, probably renal, in the left hypochondrium. As the patient did not improve, became febrile, and suffered much pain, and was moreover still passing pus and losing flesh, Dr. Israel was consulted. He confirmed the fact of a tumour in the left hypochondrium, almost fixed, irregular and non-fluctuating. Although there had been no hæmaturia, nor passage of gravel, Professor Leyden had diagnosed impacted calculus, and shortly after symptoms of perinephral inflammation set in. This decided them to operate, and on May 8th Dr. Israel proceeded to perform nephrectomy, an exploratory puncture giving exit to pus. The lumbar incision was selected, and after dividing the sheath of the sacro-lumbalis and some fibres of the quadratus, a large abscess was entered from which nearly two pints of pus escaped. The kidney could now be felt at the bottom of this cavity, covered by

layers of dense fibrous tissue. The detachment of the kidney was effected with some difficulty, and in the process a large stone was felt lodged at the entrance of the ureter, the kidney being converted into a chambered sac filled with pus. The renal pelvis was, curiously, not dilated, and to this fact Dr. Israel attributed the absence of fluctuation. The operation lasted an hour and a quarter, but it was well borne, and the urine passed since has been free from pus or albumen. Prof. Leyden added some remarks upon the clinical course of the case, and said that at first it was a question whether they were dealing with tubercular kidney, since the patient belonged to a tubercular family; but a careful microscopical examination of the urine by Dr. Mendelssohn failed to detect any bacilli, and he made the diagnosis of renal suppuration probably due to calculus. For a time the patient improved, the tumour diminishing in size and the pyuria lessening; but a relapse set in with severe pain, rigors, and increased discharge of pus, until finally evidence was plain that the suppuration had extended beyond the limits of the kidney, although the pelvis was not found to be dilated, and the signs pointing to this having been the case at an earlier period, when the tumour was larger and fluctuating, must be attributed to the inordinate degree to which the kidney itself had become sacculated.

Since the above was written we read in the *Boston Medical and Surgical Journal* that "another operation of nephrectomy has been performed in Philadelphia, Dr. S. W. Gross being the operator. The patient, a lady, Mrs. Z——, fifty-nine years of age, was of spare habit, and had suffered much pain accompanying an abdominal growth, forming a tumour, which had been first noticed only about three months previously. There was at first a doubt whether the tumour was renal or ovarian, but on careful examination Dr. Gross decided it to be malignant disease of the kidney. On April 20th laparotomy by median incision was performed, and the right kidney removed; it was found transformed into a cancerous mass, with very little healthy structure remaining; owing to numerous adhesions a ligature was made to embrace the attachments, and the pedicle cut short. At the same operation the gall-bladder was found to contain several calculi, and cholecystectomy was also performed. On the next day the patient was doing quite well, the pulse was good, and the temperature was not elevated, but the following day she perished with peritonitis."

THE EDINBURGH SYSTEM OF NOTIFICATION.

IN offering criticism upon Dr. Littlejohn's invention, as judged by results, we must not be supposed to be blind to the merits of his system when compared with that in vogue in other towns where compulsion is placed on the shoulders of the profession. To argue that under this method of notification *no* good had resulted would tell more against the general principle of notification than against the Edinburgh system; but as we heartily support the proposal to make the authorities in some way aware of the existence of infectious disease, our regret is keen that Dr. Littlejohn's "decided success" cannot be more conclusively proven than in his figures published last week. The facts that over 7000 cases of infectious disease were reported in one year in this comparatively limited and usually healthy population, that of these under 8 per cent. were induced to receive the benefits of a splendid hospital, and that in four years the zymotic mortality, as compared with a period during which a terribly fatal small-pox epidemic raged, had only been diminished from 15·31 per cent. of the deaths to 12·18, give evidence of much cry but little wool. If we remember aright, the zymotic death-rate in Greenock, where the householders alone notify, has shown a much more marked fall; and, indeed, there are many important sanitary districts without any aid from this new method where a much more considerable decline has been recorded. Dr. Littlejohn, in his modesty, gives far too little credit to other measures which he has initiated or adopted, and, notably, he forgets the expenditure of almost half a million in the city improvement scheme, which, under the late Dr. Chambers, he did so much to induce Edinburgh to adopt. In the first draft of the General Police Bill for Scotland, compulsory notification on the part of the householder, with optional power to give notice on the part of the medical attendant (a fee of half a crown being allowed), was adopted; and we feel confident that had Dr. Littlejohn had such an excellent system to work the number of cases to be dealt with would not, after four years' trial, be increasing by thousands, but with energetic efforts at isolation would, instead, have been a vanishing quantity.

THE PORT OF LONDON.

AT a meeting of the Court of Common Council, held on the 24th ult, it was decided to erect a hospital for infectious diseases on shore below Gravesend, in place of the hospital-ship *Rhin*, which is both old and dilapidated. The Port Sanitary Committee have taken much pains to ascertain what course was the best one to pursue, and it is on the advice of the medical department of the Local Government Board and of Dr. Collingridge, their own health officer, that they have finally determined not to fit up another floating hospital. In coming to this conclusion, they would appear to have been largely influenced by the fact that it is almost impossible in any vessel to isolate two different infectious fevers simultaneously without risk of the spread of infection, and the history of the *Rhin* has shown that patients admitted with one disease have contracted another before they have been discharged. The new hospital will consist of a completely fitted administrative block, of one ward-pavilion for ten patients, and of a small single ward for better class patients or for other special purposes, all the buildings communicating with each other by means of a covered passage-way. The first cost is to be limited to some £4000, but further buildings may be erected hereafter if necessary. All the details as to the construction have evidently been carefully thought out, and the Port of London will, we trust, soon have ample means of preventing the spread of infection to the metropolis by means of shipping arriving in the Thames.

"THOROUGH" REMOVAL OF CANCER OF THE BREAST.

AT the annual meeting of the Medical Society of the State of Pennsylvania held this month, Dr. S. W. Gross recorded his results from the "thorough" removal of cancer of the breast. The operation consists in amputation of the mamma with the whole of the covering skin and fascia, and the fascia over the pectoral muscle, together with exploration of the axilla and complete removal of the lymphatic glands if any of them are found to be infected. Dr. Gross has operated in this way twenty times; in one he was unable to remove all the obviously diseased tissues, in three others he has not been able to obtain any subsequent history. Of the remaining sixteen cases one died, one was incomplete, in seven recurrence within a year ensued, and seven cases were considered to be successful, for they had remained free from recurrence for periods ranging from eleven to fifty-six months, or an average of over twenty-seven months. Three patients were shown to the Society, one of whom had been free from recurrence for four years and eight months, one for three years and eight months, and the third for sixteen months. In the second of these cases the axillary glands were not removed, in the other two they were. The cicatrices were soft, pliable, and freely movable.

NON-TRAUMATIC PERIPHERAL NEURITIS.

DURING recent times perhaps the most promising and interesting paths of neural pathology have been those relating to the influence of the nervous system in the production of nutritive lesions of almost every tissue of the organism. This is not only brought out in the large number of recorded instances of such affections, but also in the remarkable speculations which have been adduced to explain their occurrence. In choosing a site wherein to locate the essential or proximate cause of such lesions, none seem so inviting on physiological, almost instinctive, grounds as the central ganglia of nerve-cells. Charcot selected the large cells of the anterior cornua as the seat of the lesion which presided over the affection of bones and joints associated with the phenomena of locomotor ataxy. Buzzard speculated on the existence of a "centre" in the floor of the fourth ventricle which governed the tissue changes of joints, and pointed to the frequent association of gastric crises with arthropathies as supporting such an hypothesis. Bärensprung, Charcot, and others have regarded the ganglia on the posterior root as operative in the causation of herpes zoster or shingles, and certainly with greater probability of truth as compared with the previously mentioned conjectures. It will be remembered that Jonathan Hutchinson has suggested that some cases of trophic lesion may be due to a morbid state of the peripheral vaso-motor nerves. In a series of articles now appearing in the *Archives de Neurologie*, MM. Pitres and Vaillard are contributing papers with the object of establishing the importance of peripheral nerves in the origination of the various nutritive lesions. The present number of the *Archives* contains an account of two cases which are given in support of their views. The first instance happened in a patient the subject of leucocythæmia. Towards the close of life an area of anæsthesia, which was nevertheless the seat of much pain, appeared on the chin, lower lip, gums, and a part of the buccal mucous membrane, followed by ulceration of the lower lip. At the autopsy an examination, directed only to those parts of the inferior dental nerves after their emergence from the dental foramina, showed that there were no healthy fibres; the myelin sheath was segmented into droplets and granules, the nerve tubes were partially atrophied and deformed with varicosities, some fibres were so much changed that their interior contained nothing more than yellowish granulations strewn with nuclei. We do not think it justifiable to draw any inference from this case; the insufficient examination of the nervous tissues apart from those mentioned, and the possibility that the alterations of the nerves discovered were secondary to changes, not necessarily ulcerative, of the tissues involved, are, we think, considerations of much weight. The second observation was made in a case of progressive locomotor ataxy, with chronic œdema of the left lower limb and arthropathy of the left knee-joint; the post-mortem examination revealed typical sclerosis of the whole of the posterior columns of the spinal cord, with changes in the peripheral branches of the left sciatic nerve. It may not be unimportant to mention that the right sciatic nerve, although apparently examined by the same mode of preparation, revealed no morbid signs. Many fibres of the left sciatic nerve exhibited degenerative changes like those which have been named Wallerian, after the great experimenter on nerve degenerations; the posterior articular nerve to the left knee-joint, as well as the muscular nerves, presented similar lesions. The coexistence of the arthropathy with the degeneration of the nerve is certainly important; but, as with other examples of even constant association, the interpretation is by no means easy. M. Déjerine has recently described degenerative lesions of the sensory nerves of the skin supplying a patch of anæsthesia in an ataxic patient. Atrophy of the optic nerve is familiar in tabes dorsalis; although associated, it is probably not continuous in structure with the sclerosis of the spinal cord. In connexion with these considerations the frequent occurrence of transient nervous symptoms, usually ascribed to a flying neuritis, in the earlier periods of tabes dorsalis is noteworthy.

TELEPHONES FOR HOSPITAL.

DR. JACOB of Dublin writes to the *Freeman*, urging the use of telephones to establish closer communication between the resident officials at hospitals and the members of their honorary staffs. The convenience of this mode of intercourse would doubtless be great, and we are fully prepared to endorse all that Dr. Jacob, inspired by that enthusiastic devotion to his profession for which he is remarkable has to urge in support of his appeal; but it must not be forgotten that there is another side to the question. If the honorary officers of hospitals are to be always on the alert, and practically always on duty, the post of hospital surgeon will be even more onerous than it is at present, which would be a needless aggravation of the wrongs of honorary officers. As it is, public opinion has not even an approximate idea of the money value of the services rendered by hospital physicians and surgeons. It is so much the fashion to think that the medical men attached to hospitals are, in one way or another, requited for their time and toil that the public, and particularly governors of hospitals, have ceased to count the worth of the *medical* charity they administer—a charity which consists not in the money contributed by donors and subscribers, but in the brains and energy of physicians and surgeons. There is not a hospital in existence but would either have to treble its income or close its doors if medical men insisted on being paid for their services even at the lowest rate of fees. We are always glad to hail new indications of zeal and enterprise on the part of medical men engaged in the gratuitous service of the sick poor, as the most distinguished members of our profession are engaged; but we venture to think something should be done to emphasise the fact that although physicians and surgeons are willing to spend and be spent in charity, their self-sacrificing exertions must not be supposed to cost them nothing, or to be the mere overpouring of an energy which they are unable to suppress. In plain truth, if the very few salaried officers of hospitals are to be relieved from responsibility, and the great unpaid are to do all the work, it should, at least, be understood that the public obligation will be proportionally enhanced, and that medical charity is, even more than heretofore, the charity of medical men, who are not merely willing but eager to devote the best of their days and strength to the practice of a virtue which—in a very hard and practical sense—is its own reward.

THE NORTH-EASTERN HOSPITAL FOR SICK CHILDREN.

THE new buildings of the above institution were thrown open for inspection by visitors on Thursday, the 30th ult., when a large number of ladies and gentlemen availed themselves of the invitation of the committee. It speaks well for the activity and liberality of its supporters that in comparatively few years so fine a block of buildings should have been erected. The out-patient department is a model of its kind, and the wards are planned upon the most thorough principles that modern sanitary science dictates. We trust that the efforts now being made to increase the building fund will result in the completion at no distant date of the whole of the contemplated work. Situated in a densely populated district, this hospital has, from its foundation in 1867, given relief to an annually increasing number of patients, whilst the excellent manner in which it is managed is an additional reason why it should be well and widely supported.

TUBERCULOSIS IN INFANTS.

The *Medical Record of New York*, May 12th, contains a suggestive paper by Dr. J. Lewis Smith, Clinical Professor of Diseases of Children in Bellevue Hospital Medical College, on Tuberculosis in Infants. The paper was founded on two recent and simultaneous cases and specimens exhibiting the lesions of acute miliary tuberculosis. One was a male child, aged ten months, in the Foundling Hospital, apparently well nourished and wet nursed. The histories are given too briefly, but the post-mortem appearances are well described. In the first case (ten months) the lungs were thickly studded with large well-defined tubercles; the bronchial glands were large and cheesy, and one contained a thick creamy fluid; the liver contained tubercles about half the size of those seen in the lungs; the spleen was of normal size, but contained tubercles in abundance; the kidneys showed five or six large tubercles on the cut surface; the solitary follicles of the intestine showed congestion and occasional ulceration; the mesenteric glands were large and cheesy; in the brain a few tubercles were found scattered over the pia mater. In the second case, a twin boy, aged seventeen months, always delicate, suffered from cholera infantum in December, 1881, returned to the Foundling Asylum in January, 1883, and died four hours after admission. There was marked emaciation; there were cavities in the upper lobes of both lungs, containing thick greenish-yellow fluid; a few small transparent tubercles were seen on the surface of the lungs; small tubercles were scattered sparsely through the liver; the mesenteric glands were large and cheesy; the small intestine showed ulceration of the lowest Peyer's patch, and occasional ulceration of solitary glands; similar ulcers were found in the large intestine. Dr. Smith remarks that tuberculosis is probably more common among the city poor than those are aware who observe disease chiefly in the better walks of life. He recognises two important factors in the etiology of tuberculosis in children: inheritance and the risk of direct conveyance of bacilli from sick mother to child, and the occurrence of caseous material in some part of the system. He points out that the wide diffusion of tubercular material in healthy tissue makes diagnosis difficult until inflammation is set up. The wide dissemination of tubercle in infants is very noticeable. It can often be inferred from wasting, poor appetite, loss of strength, and cough, when it cannot be demonstrated by physical signs. Such symptoms justify the use of cod-liver oil and hypophosphites. A favourite prescription in such cases in the two asylums for foundlings in the city is the following. A grain of carbonate of ammonia, a grain of ammonio-citrate of iron, with a drachm of syrup, every two or three hours, between doses of cod-liver oil, for children of one year. We direct attention to Dr. Smith's views from our high opinion of his diagnostic and pathological work.

THE BREACH OF CONFIDENCE.

In the House of Commons last week an explanation—we cannot say a satisfactory one—was given by the War Minister of the circumstances under which the report of the Army Medical Inquiry Committee was made known through *The Times* before being issued to the members. It appears that Lord Morley, the president of the committee and Under-Secretary for War, gave his own proof of the report and evidence to *The Times* on the distinct understanding that nothing was to be published until the papers were in the hands of members. It is unnecessary to discuss the question how far this was justifiable on the part of an individual member of a committee without the knowledge and assent of the other members. Had any of the medical members done such a thing we can conceive what a howl of indignation would have been raised. The gentlemen connected with *The Times*, of whose "good faith and discretion" satisfactory proof is said to have been required, rewarded Lord Morley by breaking through this "distinct understanding," and published such extracts from the evidence, and such articles based upon them, as led Lord Hartington to say that "one of the reasons for which he regretted the publication was that not only had it been published without authority, but, in his opinion, it was published in a manner calculated to mislead the public." We trust the event will act as a caution to Lord Morley, and will put an end to the system of favouritism which Lord Hartington admitted has been in operation at the War Office "for some time past." The result in the present instance has not been very satisfactory to the officials concerned.

PROFESSOR VALENTIN.

The death of Professor Gabriel Gustav Valentin, which is reported from Geneva to have occurred on May 24th, removes one more name from the roll of modern scientific worthies. Professor Valentin was born at Breslau in 1810, graduated in 1832, and began practice in his native town in the following year. In 1835 he published a "Handbook of the History of Development," and in 1836 was appointed Professor of Physiology in the University of Berne, a position which he held till 1881, when ill-health compelled him to resign. He was recognised as an excellent teacher and a profound physiologist, and was the author of many scientific works, two of which were written in Latin: "De Phænomeno Generali et Fundamentali Motus Vibratorii continui"; and "De Functionibus Nervorum Cerebralium et Nervi Sympathici, libri quatuor." He wrote also a "Textbook on Physiology," which was rendered into excellent English by the late Dr. Brinton, and is still remarkable for the skill and clearness of exposition it presents. Other works by him were a "Groundwork of Human Physiology," a "Repertory of Anatomy and Physiology," an "Examination of the Effects of Polarised Light on the Life of Plants," an elaborate work on the "Adaptation of the Spectroscope to Physiological and Medicinal Purposes," and many other memoirs and shorter papers, which attest his vast knowledge and untiring industry. The last papers from his pen are contained in the *Zeitschrift für Biologie*.

TRANSFUSION OF SALINE SOLUTION.

A case in which life was undoubtedly preserved by intravenous injection of saline fluid has just been recorded by Dr. Szuman of Thorn (*Berl. Klin. Wochensch.*, No. 21). A lad fifteen years old sustained through a machinery accident severe injuries, including compound fracture of the neck of the right humerus, with wound of the shoulder-joint, compound fracture of the right tibia, and simple fracture of the right femur. He was admitted into hospital in a collapsed state and profoundly anæmic. Resection of the upper fragment of the injured humerus was at once performed, and this wound as well as that in the leg thoroughly irrigated with antiseptics and drained. During the operation artificial respiration and injections of ether had to be employed. He rallied from the effects of the operation, but about forty-eight hours later, shortly after the dressings had been changed for the first time, he was attacked with convulsions attributed to cerebral anæmia. Injections of ether, lowering of the head, friction to the extremities, and an elastic ligature applied to the sound leg produced no result, and as a last effort recourse was had to intravenous injection of a solution of common salt (6 grms. to 1000 grms. of distilled water) with 1 grm. of sodic carbonate. No transfusion apparatus being at hand, an irrigator, previously disinfected with a 5 per cent. carbolic solution, was employed, a small drainage-tube being attached to a trocar (1 mm. in diameter),

which was thrust into the left median vein, the vein being first exposed, and a segment of it raised from its bed by two catheters placed transversely beneath it. As soon as the point of the trocar was within the vein it was withdrawn, and the cannula thrust onwards for a short distance before attaching the irrigator-tube. The injection was at first commenced under a low pressure, and after about one-fourth of the total quantity (i.e., about 250 grms.) had been injected the patient opened his eyes and spoke, and the spasm ceased. After 760 grms. had been injected the operation was abandoned, the pulse having fallen from 144 to 112. The result was most satisfactory, no bad symptoms recurring, and the reaction being very transitory.

FALSE CERTIFICATION UNDER THE REGISTRATION ACT.

MR. JOHN EVANS, Surgeon, of Beaufort and Pontlottyn, and his unqualified assistant, Mr. E. W. Probett, have been prosecuted, at the instance of the Registrar-General, for unlawfully and wilfully making a false certificate of the death of a child, Margaret Morgan. The child had been attended by the assistant and had not been seen by the principal, in consequence, it was alleged, of his being suddenly called away on the day of the child's death. It was, however, attended for several days by the assistant. It was admitted that the certificate was filled up by the assistant, but that the signature was the principal's. The stipendiary, while convicting the assistant and fining him £5, declined to convict the principal on the ground that the evidence was insufficient to show that he was a party to giving and making the false certificate. He admitted that it was a reprehensible act to leave blank certificates about signed by the principal. But this did not necessarily involve the offence named in the summonses. A case for a superior court was granted.

THE OPINION OF A MATRON.

AN inquest was held at Bolton on the 26th ult. on the body of a man who died in a cab whilst being removed to his home from the infirmary by order of the matron. Whilst the deceased was being placed in the cab, the house-surgeon disclaimed all responsibility in the matter, as the man was not fit to be moved. A member of the infirmary committee, who was present at the inquest, said that in the matron's opinion the man was in a fit state for removal; thus recording another example of the truism, "a little knowledge is a dangerous thing." The jury returned a verdict of accidental death, and recommended that in future no person be removed from the infirmary without the authority of the house-surgeon. That the power of removing patients should be vested in the matron seems strange; and we cordially support the recommendation of the jury that the house-surgeon be allowed to perform the duties pertaining to his office without the risk of coming into antagonism with other officials at the infirmary, and that the power of the lady engaged to superintend the household affairs be somewhat curtailed.

WOOLSORTERS' DISEASE.

THE inquest on the body of William Hird, the woolcomber of Bradford, to which we referred last week, was concluded on Tuesday. The jury found that death had resulted from "a blood poisoning, known as woolsorters' disease," and added the following recommendation:—"The jury on this inquest beg to recommend to Messrs. Mitchell Brothers in carding faller pickings, particularly those of Van, to blend them with shorts, and that all the faller pickings be subjected to two washings in hot water with soap before being carded, and thus prevent the risk of workpeople getting woolsorters' disease."

PRELIMINARY EDUCATION OF AMERICAN MEDICAL STUDENTS.

FROM an account in the *Medical News* of the annual meeting of the Pennsylvania State Medical Society we learn that a committee of that Society presented a report recommending that all students of medicine in that State should be obliged to pass a preliminary examination before commencing professional studies. We are glad to find that the report was adopted, and we trust it will be acted upon, for it will meet one of the chief wants in the American medical schools. It was not adopted, however, without a vigorous opposition from Dr. S. D. Gross, who thought the scheme "impracticable and impolitic," although it was pointed out that the examination would not require more than is demanded from boys of sixteen to eighteen at every good school. This is Dr. S. D. Gross's view: "It is of the first importance that the examiners inquire into a young man's moral character; he should be a gentleman by breeding and education; then a fair knowledge of his mother-tongue, some knowledge of Latin and Greek, but not too much. Let the standard be low. Of what use to the medical student is higher mathematics, geology, mineralogy, and botany? Who makes his own medicines at the present day? The time was when a knowledge of botany was essential: it is so no longer. If a man desires to study botany, let him do so; but, my word for it, he will not make much of a student of medicine." Such views were very rightly rejected by the majority of the members of the Society.

FORTY-FIVE YEARS OF SMALL-POX MORTALITY IN LONDON.

IT appears, from the Registrar-General's Annual Summary for 1882, that the deaths from small-pox in London last year fell to 431, against 2367 in 1881, and were equal to an annual rate of but 0·11 per 1000 of the population. The mean annual death-rate from this disease, which caused 47,936 deaths in the forty-five years 1838–82, was 0·40 per 1000. The mortality from small-pox in London last year was lower than in any year since the three years 1873–74–75 (immediately following the remarkable epidemic of 1871–72), when an exceptional immunity from the disease prevailed. Unfortunately the Annual Summary does not distribute the hospital cases of small-pox to the localities from which the deceased inmates were admitted; it only shows where the deaths were registered. It appears, however, that 96 of the 431 fatal cases were of children under five years of age; 56 of these were certified by the attending medical practitioners to be unvaccinated, and only 4 were certified to have been vaccinated; while in the 36 remaining cases the medical certificates gave no information as to the vaccination of the deceased children.

THE VENOMS OF SERPENTS.

AN inquiry into the intimate nature of the venoms of serpents has been set on foot by Weir Mitchell and Reichert. In physical characters the poisons which were obtained in a fresh state from the rattlesnake, mocassin, and copperhead do not differ much from one another; they are all in the form of a slightly turbid, yellowish fluid, with a varying degree of viscidity, and are always acid and odourless. When dried the venoms resemble ordinary egg albumen; aqueous solutions still preserve the acid reaction, and, apparently, all the properties of the fresh virus, except that the intensity of the poison is somewhat diminished. The authors have been able to separate three proteid bodies, one having the characters of a peptone, a second the reactions of a globulin, and a third, not yet thoroughly studied, seems to be an albumen of innocent action on the animal organism. The peptone possesses poisonous properties, but the chief pheno-

mena of snake poisoning seem certainly to be due to the venom-globulin, which probably attacks the respiratory centres and destroys the coagulating function of the blood. Bromine, iodine, hydrobromic acid (thirty-three per cent.), caustic potash and soda, together with Condy's fluid, as Lacerda had shown, were all proved by the authors to be capable of destroying the poisons of the rattlesnake (Crotalus adamanteus), copperhead (Agkistrodon contortrix), and mocassin (Toxicophis piscivorus).

THE ROYAL RED CROSS.

THE first list of ladies upon whom Her Majesty has been pleased to confer the decoration of the Royal Red Cross has been published. It includes six members of the Royal Family and twenty-five other ladies, the latter headed by Lady Strangford and Lady Lloyd Lindsay. Immediately after the titled ladies comes the honoured name of Florence Nightingale, followed by that of Mrs. Deeble, the lady superintendent at Netley, who was sent out first to the Cape and afterwards to Egypt. It is pleasing to find that those labours of the ladies in a field where their services are so valuable have been appreciated in the highest quarter.

LIGATURE OF INTERNAL JUGULAR VEIN.

DR. MARKOE related to a recent meeting of the New York Surgical Society a case in which, during a deep dissection under the sterno-mastoid muscle for removal of a glandular tumour, he opened the internal jugular vein just opposite the entrance of the lingual and superior thyroid veins. The hæmorrhage was very profuse. After checking it by tying the lips of the wound he dissected the parts carefully, and placed a ligature on the vein above and below the wound, and then cut the vessel across between them, to relieve all tension upon the vein. He considered that it was not a safe practice to leave a lateral ligature upon a wounded vein. Dr. Gross's statistics show that secondary hæmorrhage is unknown after complete ligature of a vein.

BETTER LATE THAN NEVER.

WE observe with satisfaction that the military authorities have at last realised the fact that the opinion of a medical officer on the subject of the soldier's equipment may be of value. The military papers announce that Surgeon-Major J. F. Beattie, M.D., has been appointed a member of the permanent committee on military equipment and uniform, of which Colonel R. Harrison, C.B., is president, and to the composition of which, excluding the medical element, we lately called attention.

TWO cases came before the Wakefield magistrates last week, which revealed an amount of ignorance and recklessness on the part of the accused in matters of health almost passing belief. In one case, a woman was fined 5s. and costs for selling to a ragman clothes worn by a small-pox patient about to be removed to the hospital. In the other case, a woman was fined 10s. and costs for pawning her son's clothes which had been worn by him whilst suffering from the disease.

A PIECE of land in the suburbs of Washington has been purchased at a cost of £6500 for the erection of the Garfield Memorial Hospital. The cost of the building will be defrayed from funds realised by the sale of the Soldiers' and Sailors' Orphan Asylum property.

THE next inaugural address of the Midland Medical Society will be delivered by Mr. Jonathan Hutchinson, F.R.S.

MR. GEORGE FLEMING, LL.D., F.R.C.V.S., Army Veterinary Inspector, has been unanimously re-elected for the fourth time President of the Royal College of Veterinary Surgeons. At the annual meeting on the 7th ult. Mr. Fleming was presented with two portraits of himself (one to be placed in the College) and a service of silver plate, subscribed for by members of the veterinary profession in different parts of the world.

WE are informed that the Ascham Society, at its meeting on May 29th, unanimously resolved that the science of hygiene was one that might with advantage to the public be added to the list of subjects on which grants by the Science and Art Department are allowed, and that a copy of the resolution should be sent to the Vice-President of the Council and to the Science and Art Department.

AT a meeting of the Hampstead Vestry on the 24th ult. a resolution was passed strongly protesting against the Metropolitan Asylums Board again contesting at law the decision arrived at with respect to the small-pox hospital. The vestry consider that such action on the part of the Board would be attended with a wasteful expenditure of public money.

A SCHEME for the manufacture of illuminating gas from town sewage is stated to have been patented, and will shortly come into practical operation. It is to be hoped that this attempt to solve the "utilisation of sewage" problem will be attended by greater success than former efforts to convert a nuisance into a source of wealth.

IN consequence of the greatly increased number of students attending the classes at the University of Durham College of Medicine, the anatomical department has been reorganised, the joint lectureship and the demonstratorship having been combined into a single anatomical chair. To this post Dr. W. P. Mears has been appointed.

A DEPUTATION of medical students is to wait on Mr. Mundella at the Privy Council Office to-day (Friday) in reference to the question of registration of the qualification obtained by candidates who pass the examinations at the respective Medical Boards.

THE Director-General of the Army Medical Department will preside at the inaugural lecture to be given in the Parkes Museum on Friday, June 1st, at 5 P.M., by Professor F. De Chaumont.

HER MAJESTY has been pleased to approve of the honour of knighthood being conferred on Alfred Roberts, Esq., hon. secretary and consulting surgeon to Prince Alfred Hospital, Sydney, N.S.W.

DR. JOHNSON of Texas reports the case of a child who had a menstrual discharge when a week old, and has menstruated regularly every month up to the present time. She is six years old.

WE may remind our readers that the Clinical Society will hold an extraordinary meeting this (Friday) evening, to allow of the reading of several papers still in hand.

THE national schools at Great Baddow and Writtle are closed in consequence of the epidemic prevalence of measles in the districts

HOSPITAL ADMINISTRATION.

No. V.

MODE OF ELECTION OF PHYSICIANS AND SURGEONS.

THE present modes of election may be classified under four heads—viz.: 1. By the treasurer or chief administrative officer of the hospital, by whatever name he may be called. 2. By irregular methods in some special hospitals. 3. By the whole body of governors. 4. By a specially appointed election committee.

1. *Election by the Head of the Hospital.*—This method is confined to a very few hospitals, which are ruled by an autocrat, whose word is law, and who, if he please, can push into one of the most leading positions in the profession any of his relations, friends, or favourites, no matter how unfit for the office such person may be. It is only the *esprit de corps* of the profession, and disinclination to speak ill of any member of it, that have prevented to the present time an exposure of many appointments made in this way. It is undeniable that some good appointments have been thus made, but we can recall to mind many a good man who has been placed temporarily in one of these posts, but who has been shelved at the discretion of this lay autocrat when it has seemed to him necessary to make an opening for one of his friends, or for one who by undue subserviency has managed to more thoroughly ingratiate himself into favour. Thus the mischief done does not end with the appointment, but tends to foster a spirit of servility and toadyism, and to destroy all free and independent professional action. It used to be jokingly remarked of one of the great hospitals that, as the stars differed from each other in magnitude, so the members of its medical staff differed from each other in superior diplomacy and guile.

2. *Irregular Methods in some Special Hospitals.*—It is difficult to speak in language too severe of the recent spread of special hospitals and their rapid multiplication. The origin of many of them is due to most questionable and unprofessional proceedings. Thus they are, as is well known, often only the professional advertisement of their promoters, who by such means keep their names prominently and constantly before the public. They unblushingly appeal for support in aid of hospitals, the want of which never has and never will be felt, and by innuendo cast a most unjust slur on the physicians and surgeons of our large hospitals, who both can and do treat these same diseases with as much care as, and with more freedom from bias than, the specialist. The appointments to these hospitals are on a par with the rest of their proceedings. The committee are frequently the creatures of the advertising promoter, and appoint as his colleagues such men as he tells them.

3. *Election by the whole body of Governors.*—In all the county hospitals elections were at one time thus conducted, and, unfortunately, the practice still survives in a considerable number of them. It is difficult for anyone who has not had practical experience of it to realise the worry, time, and expense entailed upon a candidate by this process. The governors probably number some hundreds, scattered over many miles of country. To each of these the unfortunate candidate must post a copy of his address and testimonials, and many of them feel aggrieved if they do not get a personal call from either the candidate or one of his prominent supporters. The chances of an applicant with local influence are enormously increased, and no one, however good his qualification may be, will venture to attack such an opponent. Should a stranger venture to do so, a lightened purse and disappointed hopes will soon reveal to him his mistake. From the professional point of view, too, it must be admitted that it is extremely *infra dig.* to be obliged to go round to every local tradesman who may be a governor of such an institution and tout for his vote. It is really time that the profession united in insisting that some more rational plan should be adopted where this obsolete practice still survives. It is, however, fair to say that these elections excite a very wide and deep interest in the hospital, and so indirectly advertise its claims to public support. Elections so conducted also cause money to flow freely into the treasurer's hands, as no one is allowed to vote whose subscription is in arrear. Still these are but doubtful blessings, and the same result may be obtained by other and less questionable means. Another frequent use of this system is that a local man learns when a vacancy has occurred, or often even when it is about to occur. He then gets his testimonials in readiness, and by the time the vacancy is advertised, he has distributed them, and, probably before any other candidate can appear on the scene, he has obtained the promises of a majority of the governors. On these occasions the subscribers will usually promise their votes most readily. They feel that one solitary vote out of the large total required is itself of small value; they have therefore little sense of responsibility, and usually vote for the first applicant.

4. *By a specially appointed Election Committee.*—This, the most recent, is likewise the best system of election. It is absolutely fair in its working, and places local and foreign candidates upon equal terms at the start. These committees of election consist usually of one hundred governors, comprising the committee of management, the acting physicians and surgeons, and such number of the governors chosen by ballot as, together with the persons aforesaid, will make up the committee of election to one hundred. Within fourteen days after any vacancy has occurred the committee of the hospital, at a meeting convened or made special for that purpose, (*a*) appoint a day, not less than fourteen days from the time of the first advertisement, for every candidate to send in his application and testimonials to the secretary, and sufficient evidence of his degrees or diplomas to the medical committee; and (*b*) fix a time—not earlier than seven, nor later than ten, days from the expiration of the last day on which applications are received—for the meeting of the committee of election. It is usual to advertise the vacancy in at least two medical and two local papers, and to disqualify every candidate who fails to comply exactly with the conditions stated in the advertisement. Each member of the committee feels a due sense of responsibility, that the whole body of governors have delegated to him their functions, expecting him to support the man most fitted for the appointment. He therefore does not promise his vote, but comes to the election determined to support the candidate who seems to him most fitted for the post. He examines each applicant critically, and finally gives his vote according to his ideas of true justice. By this means the candidate is spared much unnecessary expense; he feels that his claims will be properly weighed and considered; and the best man is not deterred from seeking the appointment through fear of undue influence. Within fourteen, and not less than ten, days before the day of election the hospital committee at a special meeting selects by ballot the number of governors required to make up the election committee to one hundred. Immediately on the close of the ballot the secretary sends to each member of the committee of election notice of the time and place of the meeting of such committee, and forwards to each candidate a printed list containing the names and addresses of the committee of election. It is the duty of the medical committee to prepare and cause to be delivered to the chairman of the election committee (usually the chairman of the hospital committee) when assembled, a report stating whether the candidates are qualified according to law. The election is then determined by a majority of the members present in person—no proxies being permitted,—ascertained

by a show of hands, or by ballot at the written request of any five or more members. In case of an equality of votes, the chairman has a casting vote, and the minutes of such meeting, signed by the chairman, are sufficient evidence of the appointment. This system is as perfect as any that can be devised, and should be generally adopted. In some instances the committee of election is appointed yearly, at the first meeting of the hospital committee after the annual meeting, and the names and addresses of all the members are printed in the annual report. This is an undesirable innovation, and should not be encouraged or adopted.

How to secure the Election of the best Candidate.—Thus only one of the present systems acts at all efficiently—the fourth,—and that or some modification of it should be everywhere adopted. In any case due provision must be made that the decision shall not rest entirely in the hands of a lay committee, but that the medical staff shall have a certain voice in the election. The reasons for this are not far to seek. Let us suppose that a high and honourable appointment is in question, and that there are twenty candidates for the post. Can the decision be safely left entirely in the hands of a committee of lay governors? Does anyone know the average knowledge of lay governors on medical matters and degrees, or rather, can anyone gauge their ignorance on these questions? It is astonishing how little gentlemen otherwise well informed know of the relative value of medical diplomas. The weeding-out process, when there are upwards of half a dozen candidates, can only be safely entrusted to the medical staff, who should be empowered to inspect the testimonials, &c., and to select not more than six of the candidates, who must be placed in alphabetical order on a reserve list. The great thing to eradicate is undue local influence, to take care that an inferior man with such influence does not beat a very superior one. This ought to be avoided by the means we have suggested; but all other things being equal, there will be many obvious advantages instead of disadvantages, if, in cases of strict equality, local influence is then allowed to turn the scale.

RETIREMENT AND DISQUALIFICATION.

The length of time a medical practitioner should hold the office of physician or surgeon to a hospital has often afforded matter for debate. The practice varies considerably at different hospitals. In London, at the endowed hospitals like Guy's, every physician and surgeon retires from office at the age of sixty, but at St. George's any such officer appointed previous to 1861 may retain office to the age of sixty-five, or even longer with the sanction of a special court. This very objectionable rule does not apply to anyone appointed subsequent to 1861, who cannot hold office beyond a period of twenty years from the date of his election, when he becomes a consulting physician or surgeon, as the case may be. This latter rule is also in force at the London Hospital, where an assistant-physician or assistant-surgeon having completed seven years' service is called physician or surgeon, provided he retains charge of his out-patients and conforms to the regulations enacted for the guidance of the assistant-physicians and assistant-surgeons. In the provincial hospitals, although the age limit is often similar to that in London, at the majority of the larger institutions the length of service varies from seven to twenty-five years, subject in the former case to re-election. And no one becomes a consulting officer under ten years' service except at Cheltenham, where five years is the minimum period. It is the general practice at the best conducted hospitals not to allow the honorary physicians and surgeons to hold any office in another similar institution, and a special meeting of the committee, where at least three-fourths of the members are present and voting, may resolve that such an officer is physically incapacitated, or has conducted himself in a manner detrimental to the hospital, and may with the sanction of a special meeting of governors declare his office vacant.

Pharmacology and Therapeutics.

NICKEL.

SCHULZ (*Wochens. für Deutsche Ingenieure*) gave to a dog weighing four kilogrammes 0·5 gramme of acetate of nickel by means of the food until as much as 10·5 grammes had been administered. The animal remained in perfect health, and had under this treatment gained one kilogramme in weight. Poisoning from the use of nickel-plated instruments would appear to be almost impossible, even when the food is acid. Schulz arrived at that conclusion from the fact that only ·02 of a gramme of nickel could be obtained from the sour milk which had been in contact with a nickel-plated vessel for eight days.

NICKEL AND COBALT.

The physiological action of some of the salts of these metals on the animal organism has been the subject of a diligent research by Anderson Stuart. Experiments were made on dogs, cats, rabbits, frogs, fishes, &c. When injected under the skin toxic effects were almost invariably produced. In frogs, soon after injection, a dark discolouration of the skin and fibrillar flickerings, gradually passing on to well-pronounced spasms, were observed; then true tetanic spasms and opisthotonos were developed, but finally gave way to paralysis, during which state the heart continued to act, though feebly. By section of various parts of the nervous system, it was shown that the phenomena were due to the action of the poison on the spinal cord. With the heart exposed, it was seen that the contractile power of the ventricle and auricle gradually waned, no matter whether atropin were previously injected or not—i.e., whether the inhibitory functions were paralysed or not. It would seem that the excito-motor action of the heart is not directly affected, but the appearances are explained by the paralysis of the large abdominal vessels, whereby the heart is not sufficiently supplied with nutritive material. In pigeons, rats, and guinea-pigs there were, briefly, the phenomena of progressive paralysis of movement. The hypodermic injection in rabbits was soon followed by lassitude, faintness, and diarrhœa, which symptoms were sometimes the only ones preceding the fatal result. If death did not ensue thus, other appearances were noted. Increase in the reflex excitability of the muscles was observed, from which cause the breathing may become spasmodic and distressed. Dilatation of the vessels of the ear and fundus oculi also occurred. Convulsions were sometimes the precursor of death. At the autopsy small blood extravasations were found in the stomach and intestines. In poisoning by cobalt ecchymoses were detected in the endocardium and pericardium, and also in the pleuræ. Although the salts were said to be free from arsenic, the whole of the anatomical picture strongly recalled that due to the effects of arsenic. The diarrhœa was believed to be explained by the increase of the secretion of the intestinal glands. In cats and dogs the chief disturbances observed were vomiting, diarrhœa, tenesmus, stomatitis, difficulty of deglutition, anorexia, thirst, staining of the teeth, and fetor of the breath. Spasmodic attacks were sometimes noted, and also paralysis, which sometimes affected the respiratory muscles to a fatal degree. The blood pressure was observed to sink gradually. This phenomenon was explained as the result of paralysis of the vaso-motor centre.

BISMUTH.

Acute and chronic poisoning by the preparations of bismuth has been restudied by Feder-Meyer of Würzburg. It was shown by Orfila that the nitrate had a direct paralysing influence on the nervous system after its absorption into the blood. A Russian work by Stefanowitsch, published in 1869, seemed to show that the effect of bismuth on the heart, kidneys, and liver was quite like that produced by phosphorus. In the mouth the changes were similar to those usually assigned to mercurialism. According to Lebedeff, after the long use of bismuth the hepatic glycogen disappears completely. Feder-Meyer found that the sym-

ptoms of acute poisoning were chiefly increase in the rate of the pulse and breathing with diarrhœa, then shivering, trismus, opisthotonos, with tendency to disappearance of the reflexes, disorders of equilibration, and fall of temperature. Death was the result of asphyxia from arrested action of the respiratory muscles. The chief changes found at the autopsy were extravasations of blood into the various organs. The symptoms due to chronic poisoning were much the same, though less marked and of a more tardy appearance. There were atrophy and fatty degeneration of the cardiac walls and of the liver. The gastric mucous membrane was slightly pigmented, and sometimes associated with scattered ulcerations and exudations of a croupy character. The cortices of the kidneys exhibited a remarkable degree of fatty degeneration.

PEROXIDE OF HYDROGEN.

Side by side with the increase in our knowledge of septic agencies in disease there has grown up a long series of antiseptic substances, on some of which different observers have placed varying amounts of reliance. Amongst the most recent antiseptics must be enumerated the peroxide of hydrogen, the use of which was first advocated, we believe, by Kingzett in this country, and which is said to form the active principle of the "sanitas" preparations. In France MM. Paul Bert and Regnard have paid special attention to the properties of this oxygenated water. Its use has been proposed and carried out by many surgeons in the treatment of unhealthy wounds; it seems to have been particularly valuable in bringing about a healthy action in atonic ulcers. Encouraging results have also been obtained from its employment in contagious diseases, such as some forms of ophthalmia, purulent cystitis, and the like. The peroxide of hydrogen is believed to act by destroying the activity of the micro-organisms of disease. The most recent communication on the use of the peroxide was made by MM. Paul Bert and Regnard before the Société de Biologie de Paris. Its employment was suggested in the treatment of deep-seated irregular-shaped abscesses, in certain cysts of undoubted parasitic origin, and in many forms of diarrhœa which were known to be associated with an increase in the number of lowly organisms, and the presence of which probably had a considerable influence on the progress of the diarrhœa. In a similar fashion a benignant influence might be exerted on ulcers of the stomach; in such cases the oxygenated water ought to be administered in the intervals of food, because digestion is greatly disturbed by its presence. The inhalation of the medicament by means of steam was suggested for cases of pulmonary phthisis, the contagiousness of which disease is regarded as beyond doubt; the mode of action of the inhalation is said to be the destruction of the living contagium. It is true, the authors say, that some microbes are provided with a protecting envelope, which sets at defiance external agencies; but we yet require to know whether this is the case with the germs of phthisis. Further experiments must be made with a view to determine whether the bacillus of phthisis can be destroyed by peroxide of hydrogen. Some bacteria are certainly not damaged by it; in this group come the bacillus of charbon and of glanders. The evidence for the assertion concerning the bacillus of glanders rests on the following experiment made by the authors. Some diseased tissues from a case of glanders were treated with peroxide of hydrogen on the one hand and with simple water on the other. Inoculations performed on two mules led to the death of both animals, though one had been vaccinated from the virus which had been submitted to the action of the oxygenated water.

SANTONIN.

As an anthelmintic santonin ought to be administered in such a form that not only the efficacy of its action shall be ensured, but also that the drug shall come in contact with the worms it is intended to destroy. From experimental investigations performed by L. Lewin on rabbits (*Berliner Klin. Woch.*, No. 12), it would appear that santonin, unless given in an oily solution, is rapidly absorbed from the stomach, so that in a very short space of time none of the drug can be detected either in the contents or the wall of the stomach. An oily preparation of the vermicide is absorbed by the small intestines, though not rapidly according to Lewin. The drug is excreted by the kidneys, but not in an unaltered state. This statement is proved by the fact that santonin dissolves in caustic alkalies without generating the cherry-red colour seen in the urine made alkaline of patients taking santonin. Lewin believes that the only rational mode of employing santonin as an anthelmintic is in the oily state. The likelihood of the appearance of toxic symptoms, such as xanthopsy, headaches, giddiness, shivering, and spasmodic attacks, is also thereby reduced to a minimum.

HYDROCHLORATE OF KAIRIN.

M. Hallopeau recently communicated a note to the Société Médicale des Hôpitaux on a new antipyretic agent introduced into therapeutics by Professor Filehne of Erlangen. The hydrochlorate of kairin is like quinine, a derivative of quinoline; its proper chemical name is methylhydride of oxyquinoline. It lowers the temperature of febrile patients, and the fall of fever is in proportion to the largeness of the dose, and is accompanied by profuse perspirations, which soon cease if the normal temperature be maintained by the use of fresh doses of the drug. Its antipyretic action, upon which M. Hallopeau has made many detailed observations, is exercised in all kinds of pyrexia. The results obtained with cases of pneumonia are especially worthy of remark, for the exhibition of the medicament is said to allow of the development of the disease without fever. M. Hallopeau believes that of all antithermic remedies the hydrochlorate of kairin is the most certain, most powerful, and most rapid; the dose employed was thirty to fifty centigrammes every hour or hour and a half in fevers of moderate intensity.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS TO THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Dr. Barry on the Sanitary State of Barrow-on-Soar.—The inquiry on which this report is based was instituted on account of a local prevalence of scarlet fever which led certain of the inhabitants to appeal for an investigation as to the sanitary circumstances of this large village in Leicestershire. Probably over one hundred persons were attacked out of a population of 2025, and twenty cases proved fatal. There being no means of isolation available, the disease gradually spread notwithstanding the distribution of certain disinfectants, the inunction of patients with carbolised oil, and some cleansing operations as regards the dwellings. The water-supply is derived from wells, some of which are merely sunk in a subsoil of sand and gravel overlying clay, and owing to their filthy surroundings they must necessarily be subject to the constant risk of pollution. The precise means of drainage are hardly known even to the rural sanitary authority, and the bulk of the drains were stated to be blocked up, thus giving increased facilities for the percolation of filth into the subsoil. The uncovered privy cesspit is also in use, and hence almost everything which could tend to foul the soil, the water, and the air has been allowed to prevail in the place. As so often happens in these neglected districts, the several Poor-law medical officers act over their respective districts in the capacity of medical officers of health. There is thus no one person who feels responsible for the health interests of the district as a whole, or to whom the authority can look for advice on matters affecting health in the entire area under their jurisdiction; they therefore gradually leave off seeking or expecting any such advice. As regards this special village, the medical officer of health was fully acquainted with its sanitary circumstances, but his attendance at meetings of the authority were never expected, and he appears not to have given any advice as to the measures he deemed necessary for the improvement of his district.

Mr. Spear on the prevalence of an infectious disease in the Bedwelty district.—This registration district contains the Abertillery urban, the Ebbw Vale urban, and the Bedwelty rural districts, which lie in the mountainous area in the north-eastern portion of Monmouthshire, and which, having suffered from the depression affecting this and other coal and iron mining districts, are partly characterised by poverty, even amounting to destitution, with its necessary results of squalor and overcrowding; this being especially the case at Nantyglo and at Blaina in the rural district. Such conditions combined with neglected sanitary circum-

stances were necessarily favourable to the spread of infectious disease, and they have also tended to put off the provision of such means of prevention as the erection of a hospital for isolation. When scarlet fever appeared, it found itself in the presence of a very general prevalence of sewage and filth nuisances, of squalid, damp, and overcrowded dwellings, of a water-supply at times unfit for ordinary household purposes, and of a population largely consisting of children who had suffered from privation. Nothing indeed appeared to have been done to prevent infection from gaining a foothold, and nothing was done to check it when it once found for itself a resting-place. Hence as many as 2200 cases occurred. Enteric fever also prevailed in different parts of the registration district in 1881 and in 1882, notably at Garnfach and Nantyglo; and at Blackwood some twenty persons were attacked with diphtheria. Such has been the neglect as regards infectious diseases in the Welsh and Monmouthshire iron and colliery districts that the inhabitants have come to regard them as an essential part of their existence, and a long residence in the immediate presence of unwholesome and offensive conditions effectually prevents those exposed to them from understanding how grave a source of danger to health, life, and prosperity they are.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Derby.—The death-rate for this borough during 1882 was 18·7 per 1000 living, a smaller rate than has obtained for five previous years. Derby is one of the towns where a system of compulsory notification of disease is in operation, and hence Mr. Iliffe is able to record accurately the state of the borough in this respect, and he should also be enabled to prevent the spread of infection to an extent which is not possible in districts not having a similar advantage. As regards small-pox, the result leaves but little to be desired. Fifteen cases occurred; they were all removed to the isolation hospital, and though their removal was effected in an old and wretched conveyance which is described as giving actual torture to the sick who have the misfortune to travel in it, yet no death occurred amongst any of the eight out of the fourteen who were vaccinated, and the disease abated. It is, however, for scarlet fever that means of isolation are most wanted, and this is especially the case in Derby, which suffers from this disease periodically in the epidemic form. In 1878 and 1879 there was a severe and fatal epidemic, which, according to a previous report by Mr. Iliffe, and owing to the absence of proper means of isolation, "killed 306 persons." The material for the infection, in the shape of an infantile population, being then used up, a gradual decrease in the fatality from this disease was observed, but with a high birth-rate the material is reproduced every few years, and now again we have apparently the commencement of a renewal of this unnecessary sacrifice of child-life. During 1882 the disease never ceased, there were altogether 770 cases, and of these 63 died. It is true that at the General Infirmary there is a separate isolation building, but this is quite inadequate to the requirements of the borough, and yet, notwithstanding this, no measures have been adopted, even after the experience of 1879, to provide a suitable hospital. The authority have an old wooden shed originally put up for small-pox, and, like nearly all its fellows, it serves for that disease alone—that is to say, people with small-pox can be removed almost to any sort of building without difficulty, but if an authority desires to save life and avoid the spread of infection from the other specific fevers against which the population cannot otherwise protect themselves, then they must have a proper building for the purpose. It might have been supposed that Derby, in seeking powers to know precisely how much infection it had to deal with, did really intend to face the difficulty, but year after year passes and the medical officer of health still pleads that means of isolation have not yet been provided. On the general question of the notification of infectious disease, Mr. Iliffe declares emphatically that "without the dual notification—i.e., by the medical attendant and the householder—compulsory notification will be an utter failure." He further asserts that the Act works smoothly, and that on the part of the general public there is every year a deeper and a fuller appreciation of its value.

Glanford Brigg.—Mr. Moxon, in his annual report on this rural district, draws especial attention to the large infantile mortality which prevails in a certain group of villages known as the Ironstone Villages, and where the deaths under one year of age annually amount to over 21 out of every 100 births, a rate which is 6 per cent. higher than that obtaining in large crowded towns. He points out all the various possible causes of this infantile mortality, and he concludes by referring to the fact that in the district in question it is a common practice to ensure the lives of children even from the moment of birth, and thus there arises the extremely objectionable and dangerous circumstance that parents have a money interest in the death of their off-spring. In view of this it is almost superfluous to point out that many of the children in question die from want of milk and proper food, or from neglect of parents to secure medical aid in case of sickness, for it becomes impossible to say how far such neglect has been due to ignorance and indifference on the one hand, or to motives of a very different character on the other. The principle of such insurances is thoroughly vicious, and in some cases it has notoriously led to demoralisation of the natural feeling of affection which parents should bear towards their children.

Hastings (Urban).—The report of the medical officer of health for the borough of Hastings (Mr. C. Knox Shaw), relating to the three months ending March last, affords favourable evidence of the sanitary condition of this district, which had a population of 42,258 persons at the census in 1881. The birth-rate was equal to 27·8, while the gross death-rate did not exceed 16·5 per 1000, which was 1·7 below the mean rate in the seven preceding corresponding quarters. It is also stated that 24 deaths of "non-residents or visitors" were recorded (the adopted definition of these terms is not, however, given), and, excluding these, the death-rate becomes 14·3 per 1000. A zymotic death-rate of 0·3 per 1000, and an infant mortality not exceeding 89 per 1000 births, speak conclusively of the exceptionally satisfactory health condition of the population of this borough during last quarter. The medical officer of health remarks that the zymotic death-rate was lower than in any corresponding quarter of the last nine years.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 6238 births and 3521 deaths were registered during the week ending the 26th inst. The annual death-rate in these towns, which had been 22·7 and 21·3 per 1000 in the two preceding weeks, was again 21·3 last week. During the first eight weeks of the current quarter, the death-rate in these towns averaged 22·9 per 1000, against 21·2 and 22·1 in the corresponding periods of 1881 and 1882. The lowest rates in these towns last week were 12·9 in Birkenhead, 15·7 in Norwich, 16·0 in Plymouth, 16·8 in Cardiff, and 16·8 in Wolverhampton. The rates ranged upwards in the other towns to 26·2 in Halifax, 26·8 in Salford, 30·0 in Newcastle-upon-Tyne, and 33·5 in Manchester. The deaths referred to the principal zymotic diseases in the twenty-eight towns last week were 373, against 386 and 329 in the two preceding weeks; they included 119 from measles, 88 from scarlet fever, 72 from whooping-cough, 38 from "fever" (principally enteric), 28 from diarrhœa, 20 from diphtheria, and 8 from small-pox. No death was referred to any of these zymotic diseases in Norwich; while the highest death-rates from these diseases occurred in Sunderland and Liverpool. Measles was proportionally most fatal in Liverpool and Newcastle-upon-Tyne; scarlet fever in Derby and Sheffield; whooping-cough in Birkenhead and Cardiff; and "fever" in Hull and Sunderland. The 20 deaths from diphtheria in the twenty-eight towns included 14 in London. Small-pox caused 2 deaths both in Birmingham and in Newcastle-upon-Tyne, and 1 each in London, Liverpool, Leeds, and Sunderland. The number of small-pox patients in the metropolitan asylum hospitals, which had been 77 on each of the two preceding Saturdays, declined to 73 at the end of last week; 10 new cases of small-pox were admitted to these hospitals during the week, against 9 and 10 in the two preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 402 and 302 in the two preceding weeks, further declined to 283 last week, and were 1 below the corrected average number. The causes of 86, or 2·0 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the

causes of death were duly certified in Norwich, Plymouth, Nottingham, Birkenhead, Bolton, and Cardiff. The proportions of uncertified deaths were largest in Salford, Oldham, and Preston.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 25·0, 26·1, and 26·9 per 1000 in the three preceding weeks, further rose to 28·5 in the week ending the 26th ult.; this rate exceeded by no less than 7·2 the mean rate last week in the twenty-eight English towns. The rates in the Scotch towns ranged from 19·2 in Leith to 32·6 in Glasgow and 36·6 in Dundee. The deaths in the eight towns included 124 which were referred to the principal zymotic diseases, showing a decline of 25 from the high number in the previous week; they were, however, equal to an annual rate of 5·2 per 1000, whereas the mean rate from the same diseases in the large English towns did not exceed 2·3. The 41 fatal cases of measles showed a decline of 26 from the exceptionally high number in the previous week; but included 33 in Glasgow, 4 in Greenock, and 3 in Edinburgh. The 39 deaths from whooping-cough, of which 19 occurred in Glasgow and 8 in Dundee, corresponded with the number in the previous week. The deaths attributed to diarrhœa somewhat exceeded recent weekly numbers. Of the 13 deaths referred to diphtheria, 5 were recorded in Glasgow, and 2 each in Dundee, Leith, and Edinburgh; with regard to the 2 deaths reported by the Registrar-General from this disease in Edinburgh, we notice that Dr. Littlejohn does not report any in his weekly return. All the eight fatal cases of scarlet fever, and 5 of the 8 from other forms of "fever," were returned in Glasgow. The 149 deaths from acute diseases of the lungs in the eight towns exceeded the numbers returned in recent weeks, and were 31 above the number in the corresponding week of last year. The causes of 112, or nearly 17 per cent., of the deaths registered in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which in the three preceding weeks had been 34·0, 31·6, and 29·5 per 1000, further declined to 27·5 in the week ending the 26th inst., a lower rate than has been recorded in any week since the middle of January last. During the first eight weeks of the current quarter the death-rate in this city averaged no less than 33·0 per 1000; whereas the mean rate in London and Edinburgh during the same period did not exceed 22·0 and 21·9 respectively. The 184 deaths in Dublin last week showed a decline of 14 from those returned in the previous week, and included 10 from whooping-cough, 9 from "fever," 1 from diphtheria, 1 from diarrhœa, and not 1 either from small-pox, measles, or scarlet fever. Thus 21 deaths resulted from these principal zymotic diseases, against 20 and 18 in the two preceding weeks; they were equal to an annual rate of 3·1 per 1000, against 2·3 and 2·4 from the same diseases in London and Edinburgh respectively. The deaths referred to whooping-cough, which had been 4 and 7 in the two preceding weeks, further rose to 10 last week. The fatal cases of "fever," which in the two preceding weeks had been 12 and 6, rose again last week to 9. The death from diphtheria was the third that has been recorded in this city since the commencement of the year. The deaths of infants showed a considerable increase, while those of elderly persons almost corresponded with those in the previous week. The causes of 21, or rather more than 11 per cent., of the deaths registered during the week were not certified—a smaller proportion, however, than in any previous week of this year.

THE SERVICES.

ARMY MEDICAL DEPARTMENT DINNER.

One hundred and eleven officers, past and present, of the Army Medical Department sat down to the annual dinner at the Inns of Court Hotel on the 25th ult. The chair was filled by the Director-General, T. Crawford, M.D., and the vice chair by Inspector-General R. Lawson (retired). The "sister services" were represented by the guests, Sir J. W. Reid, K.C.B., Director-General of the Navy, and Sir Joseph Fayrer, K.C.S.I., Indian Medical Service.

THE NEW VALISE EQUIPMENT.

Surgeon-Major J. F. Beattie, A.M.D., has been appointed a member of the Permanent Committee on Military Equipment and Uniform, now sitting at Aldershot. Col. R. Harrison, C.B., is the president of the committee. The new valise equipment, with the reduced kit proposed by the committee, will, it is understood, be adopted by the War Office authorities.

THE GUERNSEY MILITIA.

Surgeon E. K. Corbin, having by General Order been removed from the Guernsey Militia Force, has signified his intention of placing the matter in the hands of legal authorities, with a view to test the legality of the proceeding.

ARMY MEDICAL DEPARTMENT.—Surgeon-Major Acheson George Bartley, M.D., from half-pay, has been granted retired pay with the honorary rank of Brigade Surgeon.

INDIA OFFICE.—The Queen has approved of the retirement from the Service of Deputy Surgeon-General John Lumsdaine, of the Bombay Army, and Surgeon-Major John Bilderbeck, of the Madras Army.

ARTILLERY VOLUNTEERS.—1st Ayrshire and Galloway: William Moore, Gent., M.B., to be Acting Surgeon.

ENGINEER VOLUNTEERS.—1st Lanarkshire: John Ross Granger, Gent., M.B., to be Acting Surgeon.

RIFLE VOLUNTEERS.—3rd Norfolk: Acting Surgeon Irvine Kempt Milne, M.D., resigns his appointment.

ADMIRALTY.—The following appointments have been made:—Staff Surgeon Richard James Sweetnam and Surgeon Charles Edward Geoghegan, to the *Shannon*.—Surgeon James Porter to Royal Marines at Portsmouth, vice R. G. Brown, appointed to the *Wye*.

ANATOMY AND MEDICINE AT THE GROSVENOR GALLERY.

ANY large collection of paintings is pretty sure to present much that is of interest to the anatomist, since the painter's art concerns itself a good deal with the human figure, and often with that figure in what may be termed its anatomical condition. Art moreover deals largely with human emotion, with both the normal and abnormal aspects of existence, and in such connexions it cannot fail to touch here and there upon ground that lies within the somewhat extensive boundaries of medicine. Of late years especially, art, in one of its most recent movements, has concerned itself much with the physician's aspect of life. The so-called æsthetic movement has at least produced the æsthetic human being, and has familiarised us with the artistic aspect of emaciation, debility, and cachexia. Some of the more dismal of these æsthetic productions appear to aim at detecting some picturesqueness in pathology and some beauty in disease, and have presented us with artistic heroines who excite the pity of the robust and the curiosity of the medically minded.

In the present exhibition at the Grosvenor Gallery there are several pictures that would be considered to belong to the æsthetic school of art. Foremost among them may be mentioned Mr. Burne Jones's admirable painting, "The Hours" (184). The Hours are represented by six young women sitting in a row upon a bench. The first female is holding her forehead and her left ear in her hands, as if she had neuralgia; another female is gazing with undecided eyes upon a peculiarly unwholesome-looking fig, as if speculating upon the consequences of eating it. The fifth lady is playing upon a stringed instrument of remarkable shape, and which in outline reminds us of the flap cut from the forehead in rhinoplasty. The last Hour is asleep. The drawing is exquisite, the colour charming, and the whole design wonderfully delicate and graceful, but it is much to be regretted that the females are not more robust. They are all cachectic-looking, appear weary and sick, are anæmic and sallow, and seem to have been rendered utterly apathetic to their surroundings by sitting in the same position for so long. "The Wheel of Fortune" (67), by the same artist, represents a gigantic, but delicate-looking woman turning

an immense wheel—the movement of which must be quite beyond her muscular power—to which three men are attached. How the men are connected to the wheel we are not shown. They appear to simply adhere to it by their backs. They are nude, and their anatomy is particularly good, as indeed are the anatomical details of all Mr. Jones's figures. Here again, however, the pathological element comes in. The colour of the men's skin is most unwholesome, and reminds us of nothing so much as the integument of a badly injected body. They all seem very ill, and in actual pain. They show the æsthetic lower jaw—a long prominent jaw, with no fat in the infra-maxillary region; and the æsthetic neck—a thin neck with a conspicuous sterno-mastoid muscle showing in a very aggressive way its two heads of origin. And here one might point out an anatomical flaw in the design. These men are very unevenly emaciated. Their heads and necks are those of cachectic persons, yet their bodies and limbs are well nourished and very muscular. If the artist had only thrown a little more life and blood into these figures they would stand out as perfect studies of the human form. Two artists deal with the mournful subject, "By the waters of Babylon we sat down and wept." In No. 43 the females represented are all limp and ill, and have for the most part that type of countenance known in medicine as the "abdominal face." The picture represents disease rather than emotion, and it seems a pity that so much artistic talent should have been expended in producing this exhibition of human prostration. In No. 156, also dealing with the same subject, we find the same unhealthy-looking women depositing themselves very close to the waters of Babylon. It may be hypercritical to observe that the females are not all "sitting down," and so far as we can judge none of them are weeping. The central figure sits with her hands clasped to the back of her head, and from the expression of her face one would judge that she had been seized with sudden pain about the occiput. Another female seems to be completely exhausted, and may be taken as a representative of artistic collapse. The figures are well drawn, but the picture is sad, and the sadness is such as is allied to pity for the sick and enfeebled.

One might here allude to a strange production of Mr. T. M. Whistler, entitled "A Nocturne in Blue and Silver." To the uninitiated it merely appears to be a splash of colours with blue predominating, and to the medical mind may suggest an endeavour to represent the apotheosis of a blood effusion—a kind of etherialised ecchymosis. Near this nocturne is Mr. Nettleship's powerful picture, entitled "Blind," upon which we commented in our issue of May 5th.

In a pleasant little drawing by Miss M. Sharp, entitled "The Bath" (329), attention may be drawn to the vertebræ of one of the figures who is sitting with her nude back confronting the spectator. The spines of the lower dorsal vertebræ are remarkably prominent—so prominent as to suggest Pott's disease,—and this suggestion may take a little from the pleasure the picture affords. In No. 204, by Mr. Watts, will be found a well-executed study of a somewhat ghastly and anæmic invalid lolling out of an armchair; and in No. 235, "A Neapolitan Flower Girl," by Mr. Walter Maclaren, an excellent drawing of a pair of well-moulded feet. Mr. Calderon's picture (No. 82) and Mr. Glassby's marble (No. 367) are both excellent studies of the female figure from the nude; the latter, representing Medusa leaving the Temple, is peculiarly graceful. In No. 385—a study of a nude figure—the man appears to us to have the serratus magnus muscle in duplicate on his right side. Apart from this the figure is finely executed and admirable in its anatomical details.

THE BERLIN HYGIENIC EXHIBITION.

THIS building, which was opened on May 12th, is constructed of stone, iron, and glass, displaying in its plan several innovations of practical importance. It is divided into twenty-five quadrangular spaces, each of them being about twenty yards in length and the same in breadth. These are arranged in a square block containing five rows of five each. There are open spaces in some of them and several covered approaches. The front of the building is surmounted by a dome, which is only now receiving the finishing touches. It is, however, creditable to all concerned that this minor detail is almost the only matter which has had to be completed since the opening. The roofing is of corrugated zinc, and is supported in each square division by four iron columns.

Incidental to the exhibition, and doubtless intended as an attraction for the general public, are several objects of special interest. Amongst these the panorama of Gastein is deserving of mention. This celebrated mineral-water resort is often visited by the Emperor of Germany, and doubtless it is to this circumstance that its choice for pictorial representation upon the present occasion may be attributed.

Though occupying comparatively little space, the plans and volumes contributed by the Munich Hygienic Institute are interesting as showing the successful results of the energy displayed in the cause of sanitary reform by Herr von Pettenkofer, the eminent director of the establishment in question. The plans referred to represent the details of the institute itself, and regret has been expressed in several journals that no model of the building has been sent for exhibition. The course of study and experiment includes physical and chemical examination of the air, ventilation and heating, examination of water and earth, disinfection, analysis of food, and, finally, examination in a hygienic sense of clothing, dwellings, and public buildings. It is needless to state that these various tests are carried out in the greatest perfection according to the most recent methods. There is also a comprehensive display of meteorological instruments and other analogous scientific appliances. Amongst the instruments of precision which are exhibited is an apparatus for measuring even the smallest currents of air. As by its means it is possible to determine the circulation of the air between the innermost garments and the skin, its importance in the question of hygienic dress is incontestable. It is invented by Dr. Recknagel, Director of the Royal Industrial School at Kaiserslautern.

A special interest is attached to the objects exhibited by the Berlin Physiological Institute. Some of these refer particularly to the subject of electro-physiology, and the methods of treating nervous disorders according to the principles of that science. Professor Fritsch contributes an apparatus for the photographic reproduction of microscopical preparations. In this particular branch of medical science the researches of the exhibition have led to many notable improvements in the practical application of its fundamental theories.

The Austrian Government has authorised the various provinces of the Empire to send competent representatives to the exhibition, in order to report upon its contents to the respective local authorities. In their observations these delegates are to keep specially in view the requirements of their districts and the possibility of utilising, in the interests of the public health, such hygienic improvements as may meet their approval.

The popular cookery school is an object of interest; and certainly a scheme of well-ordered cookery is not out of place in an exhibition which professes to deal with all that influences the health, either beneficially or injuriously. Amongst other notable features of the exhibition will be the delivery of lectures on sanitary matters by leading authorities. In this manner the promoters are endeavouring to carry out the principle of public sanitary instruction.

The Empress of Germany has evinced a marked personal interest in the success of the exhibition and has presented forty gold medals, the adjudication of which will be decided by twenty-one members of the central committee. The list of names includes some of the most eminent medical men in Germany.

An exhibition of special interest to the medical profession is that which deals with the treatment of the sick and wounded in the army and navy. One of the railway arches in the grounds is fitted up to represent a ship's hospital on the principle adopted in the German corvettes. By a system of suspended berths the patients are protected as far as possible from the effects of the vessel's movements. The various appliances required for removing patients to and from the land, as well as for their treatment on board ship, are kept in cupboard-like spaces under the berths. Ventilation is provided for by a metal pipe rising through the deck to a height of eight or ten feet, with a movable hood. The lower end of the pipe has openings which ensure an efficient introduction of fresh air. The objects contributed by the Altona Society for carrying sick and wounded in the field include an ingeniously

arranged set of the usual appliances for treating broken limbs. These are constructed in pieces so that they can be placed in a saddle pocket. In another pocket various bandages and preparations can be carried which are required in the antiseptic treatment of wounds. Another useful appliance is the adaptation to holster-like openings in the forepart of the saddle of two wooden cases opening in the form of books, one containing surgical instruments and the other medicines. An appliance for carrying the wounded is fitted with netting instead of drill, and there is a feather pillow filled with spiral springs, on which the patient's head rests. When placed on a cart for transport there can be springs placed underneath in such a way that the effect of jolting is much diminished. Ambulance waggons of various forms of constructions are also exhibited.

THE PLAINT OF THE APOTHECARIES.

ON Friday, May 25th, a deputation from the London Society of Apothecaries waited upon Mr. Mundella at the Privy Council Office, for the purpose of urging that that body should be represented on the new Medical Board to be formed under the Medical Act Amendment Bill now before the House of Commons. Mr. Saner (Master of the Society), Mr. Statham (former Master), Dr. Randall (chairman of the Court of Examiners), and Mr. Upton (clerk of the Society), pointed out that the Bill as originally framed allowed for the representation of the Apothecaries' Society on the Divisional Board, but the Society had been struck out on the third reading of the Bill in the House of Lords. The deputation desired the Society reinstated as a part of the Board. Mr. Mundella, in reply, said that the fact of the Apothecaries' Society being in the number of representative bodies that would form the Medical Council showed that the Government were in favour of the Apothecaries' Society being included. However, in its passage through the Lords the Bill underwent several important modifications, and Lord Salisbury moved to omit the name of the Society, and if the Government had not accepted this the Bill would have been wrecked. However, that arrangement was not binding on the House of Commons. He should consult his colleagues on the matter, and see what could be done. The Government were anxious to do justice to those who had done good service in the past, and to take care that the medical education of the future should be worthy of the country.

A meeting of the members of the Apothecaries' Hall of Ireland was held last week for the purpose of asserting the claim of the Hall, under the Medical Act Amendment Bill, to appoint a representative on the Irish Medical Board as one of the existing medical authorities in Ireland. It was stated that of the 2450 medical men practising in Ireland by far the greater number were acting as general practitioners, compounding and prescribing as well as dispensing medicine under the Poor-law and Government Boards. If the Bill were passed in its present form the status of the licentiates would be lowered, but it would also have an injurious effect on the future of the general practitioner. The Bill was essentially one to provide a general practitioner for the United Kingdom, and therefore it was of the greatest importance that the licentiates under it should be properly educated and suitably examined as regarded the pharmaceutical position of their duties, as well as the medical and surgical. The following resolution was unanimously carried:—"That this meeting, having considered the Medical Act Amendment Bill at present before Parliament, are filled with consternation by the discovery that the claim of their branch of the profession is entirely ignored by the Bill, and that this act of injustice has been committed notwithstanding that their claim had been duly recognised in the first copy of the Bill introduced in the House of Lords."

WILLS OF MEDICAL MEN.

THE will and two codicils of Francis Ker Fox, M.D., of Brislington, Somersetshire, who died on January 7th last, were proved on the 19th ult. at the Bristol district registry by Charles Henry Fox, M.D., Bonville Bradley Fox, M.D., and Herbert Francis Fox, the sons, the executors, the value of the personal estate amounting to over £30,000. The testator gives his capital and interest in the partnership business of the custody and care of lunatics, carried on at Brislington House Asylum, to his sons Charles Henry and Bonville Bradley, subject to the payment thereout of annuities of £1000 to his wife, Mrs. Mary Fox, and of £200 to his daughter, Janet Sarah, for their respective lives, and of the capital sums of £3000 each to his sons, John Charles Bradley and Herbert Francis, and of £2000 each to his sons Edward Long, Francis Frederick, and Lewis Wyndham. There are a few other bequests, and the residue of his property is to be divided between all his children except Charles Henry, Bonville Bradley, and Janet Sarah.

The will of James Manby Gully, M.D., formerly of Great Malvern, but late of Orwell-lodge, Bedford Hill-road, Balham, who died on March 27th last, was proved on the 1st ult., by Mr. W. C. Gully, Q.C., the son, the sole executor, the value of the personal estate amounting to over £29,000. The testator leaves his house and land in New Zealand, and an annuity of £400, to his son Charles James for life, with an annuity of £300 to his wife Marie if she survive him; £500 to each of the three younger daughters of his said son on their respective marriages; an annuity of £300 to his sisters, Anne and Ellen, during their joint lives, and one of £250 to the survivor; £500 to his brother John Pritchard; and a specific legacy to a friend. The residue of his real and personal estate he leaves to his son William Court.

The will and codicil of George Ireland Russell, M.D., F.R.C.S., late of 39, The Terrace, Gravesend, who died on March 30th last, were proved on April 27th by Mr. E. T. Keeling and Mr. E. W. Bewley, the executors, the value of the personal estate being over £13,000. The testator gives an annuity to his granddaughter Emily Howard Coombe; settles his freehold property in The Terrace upon his eldest son George Ireland; and there are some special legacies to him, to his other son William, and to his daughter, Mrs. Frances Field. The ultimate is to be divided between his said three children and his daughter, Mrs. Laura Beaumont.

The will of Richard Hunt, M.D., of 111, Boyson-road, Walworth, who died on April 17th last, was proved on the 8th ult. by Mr. Joseph Stanley Oakenfull, one of the executors. The only legatee under the will is the testator's daughter, Miss Mary Isabel Hunt.

Correspondence.

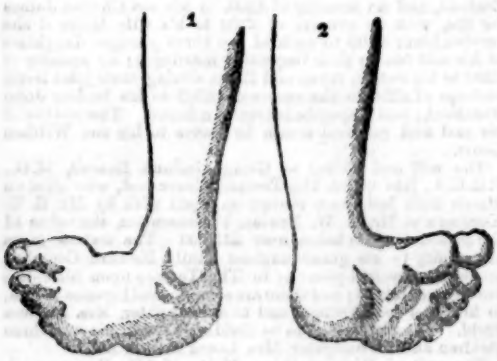
"Audi alteram partem."

LORD BYRON'S FOOT.

To the Editor of THE LANCET.

SIR,—I have not yet had an opportunity of reading Mr. Jeaffreson's work on "The Real Lord Byron," but I have seen your interesting leader on the subject, and would venture to offer a few remarks on that portion of it which refers to the condition of his lordship's foot. It is not to be wondered at that a good deal of public curiosity should have been exercised regarding the poet's deformity. Byron was a handsome man, and a sensitive one, so that he naturally felt his defect very keenly and took great pains to hide it from the observation of even his most intimate friends. As evidence of this you point out that during his last illness he had the blisters, which the doctors ordered, placed above his knees, because he objected to have his feet exposed. Bearing out the same idea is a description which I have somewhere read, given by one of his friends, of a stealthy visit made to the room in which the dead body of the poet lay, her curiosity prompting her to lift the covering and to gaze, for the first time, in awe, upon the twisted foot and shrunken limb about which so much mystery existed. The abnormalities of great men are often as much matters of observation as their excellences, and if Byron has suffered more than many in this regard he has himself in great measure to blame even in respect of his foot deformity. Mr. Jeaffreson holds it, amongst other restorations, to be an error that Byron had what is commonly called a club-foot, and describes the deformity as consisting of some elevation of the heel, with a little distortion inwards, which should constitute a slight form of equino-varus. Now, unless he has undeniable authority for his description, this cannot be

held to be the real one, for we have some very definite information upon the subject of a contrary kind. In THE LANCET for the year 1827–28, vol. ii., there appears a series of articles on "Distortions of the Foot," by Mr. T. Sheldrake, evidently a well-known surgeon and specialist of his time. On page 779, he describes "Lord Byron's Case," giving with it an illustration of the foot, which I have here reproduced. His story of Byron's deformity is briefly this: When the poet returned from Scotland he was placed in Mr. Glenny's academy, Dulwich (now the "Grove Tavern," Lordship-lane). He was also recommended to Mr. Sheldrake for treatment, but, by mistake, fell into the hands of "one Mr. Sheldrake, a trussmaker," who failed to do any good. Some years later Byron, however, found his way to the proper man, but being near his majority and anxious to take his place in the world, he declined to undergo the seclusion and treatment necessary to effect a cure. In his article Sheldrake writes: "I annex two sketches [those here given]



that I made from a cast of his foot—one view was looking at the outside, the other at the inside of his leg. By these it will be seen that when he had no artificicial support he stood upon the outside of his foot." The leg is also described as shrunken. Abandoning any attempt at a cure, Sheldrake nevertheless contrived, "so that when he was dressed his legs and feet appeared to be so equal that common observers did not perceive any difference between them in the usual intercourse of society." These contrivances Byron, it seems, continued to wear even after he left England. Sheldrake's casts and descriptions have all the appearance of good faith and accuracy, although his illustration of Byron's case represents the left instead of the right foot, so that if he is to be relied on Byron possessed a veritable club-foot of the kind known as talipes varus It may be interesting to note that in spite of his defect, Byron was capable of a great deal of exertion and agility upon his feet. "Byron's leap," at the Linn of Dee; his wanderings about the region of "dark Lochnagair," as described by himself in his "Hours of Idleness"; his ability as a cricket player, for while at Harrow his name appears as a player in one of the earliest recorded public school matches; his swimming frequently from Westminster to Battersea, as related by himself to Mr. Sheldrake, long before he swam the Hellespont—all go to show how much he enjoyed bodily exercises, and how much he excelled in them. In a medical journal we have nothing to do with the process usually known as "whitewashing," but we are quite entitled in medical matters to get at and to hold by the truth. I am, Sir, yours faithfully,

Islington, May, 1883. J. CHALMERS.

IS SCARLATINA EVOLVED FROM DIPHTHERIA?

To the Editor of THE LANCET.

SIR,—The facts recorded in the very interesting paper in THE LANCET of May 26th, by Dr. John Meredith, are well-known to me, but I must record my dissent from his interpretation of these facts. He resorts to two explanations of them, whereas one is sufficient to account for them all. Thus he proceeds to show that diphtheria will produce scarlatina—e.g., the servants with diphtheria gave scarlatina to the children; then that scarlatina will evolve diphtheria again—e.g., the children with scarlatina gave diphtheria to the mother. Now, if I might suggest the true interpretation it would be this. The servants, through friends, and the mother, through her children, having been exposed to the infection of scarlatina, and having previously had scarlatina, failed to develop true scarlatina, but obtained a sore-throat, and nothing else except a sore-throat capable of producing true scarlatina in anyone who has not had the illness before. This sore-throat very frequently has a diphtheritic appearance, but is perfectly distinct from true diphtheria. These facts I have observed so frequently, and they caused me so much trouble until I interpreted them correctly, and they are so very important in their bearing, that I need scarcely apologise for occupying your valuable space in discussing Dr. Meredith's most interesting cases.—Yours truly,

CLEMENT DUKES, M.D. Lond., &c.,
May, 1883. Physician to Rugby School and to Rugby Hospital.

THE SPECIAL TRAINING OF ASYLUM ATTENDANTS.

To the Editor of THE LANCET.

SIR,—I take the opportunity afforded by the appearance of your article on Lunatic Asylums, in THE LANCET of May 19th, to say a word in favour of a special training for asylum attendants. The necessity for such a departure from our present asylum routine is urged in your columns not a day too soon, and the problem of how best to develop a scheme for the special training of attendants should have an early solution at the hands of those responsible for the administration of our asylums. It is not surprising that you should have to say "no system exists at present for the special training of nurses or attendants for asylum work," seeing that the matter has barely been discussed in print at all. I hope, however, to have an opportunity very soon of bringing this question before the Medico-Psychological Association, in a paper containing a description of the scheme carried out here during the last two years, a statement of its results, and a plea for a thorough ventilation of the subject, and a combined determination to face and solve the problem. The idea is rapidly gaining ground in asylums that a more intimate personal knowledge of the insane can only be assured by a nearer approach to hospital methods of administration, by utilising fully the intelligence and observation of attendants, and by an increase of the medical staff. The opinions of many authorities have been lately converging in this direction to a greater extent than formerly; but if my memory serves me right Dr. W. A. F. Browne, Dumfries, conceived the plan of lectures to asylum attendants many years ago, and carried it into practice. Ten years ago Dr. Clouston, Morningside, read an excellent paper bearing upon the subject before the Medico-Psychological Association, and Dr. Munro, late of the Crichton Royal Institution, followed there the lead of Dr. Browne for some years. Others unknown to me may have been engaged in the work, but I have sufficiently quoted names to show that this idea in asylums is not a new one, though the practical outcome of it is so far insignificant. Your well-timed and suggestive reference to it must do good. The ball has not yet been fairly set a-rolling, but with one good push, and a fair start, the scheme should ere very long become automatic. I hope the importance of the subject will be sufficient excuse for my trespassing so much upon your space

I am, Sir, yours truly,

A. CAMPBELL CLARK.

Glasgow District Asylum, Bothwell, May 23rd, 1883.

THE ST. PANCRAS VACCINATION CASE.

To the Editor of THE LANCET.

SIR,—As the revaccination of the mother in this case on the day after confinement has excited very considerable public feeling, perhaps you will kindly allow me space to state my reason for my practice in this respect. I would say:—1. That the patients in the lying-in wards of a large workhouse like this, where we have nearly 300 confinements in the year, come from all parts of the metropolis, sometimes from distant parts of the country; their antecedents are often unknown, and they are frequently pre-

disposed to the contagion of small-pox and other zymotic diseases from the bad sanitary condition under which they had lived prior to admission. 2. There was no evidence that the patient in this particular case had ever been vaccinated, and it is an injunction of the Privy Council that revaccination should be performed. 3. Although she knew she was going to be revaccinated she raised no objection. 4. The patient was a strong and healthy young woman; she had had a natural labour, and she was progressing perfectly satisfactorily on the day of vaccination. 5. My experience in the matter (extending to nearly 1500 cases) leaves no doubt in my mind that vaccination when performed even thus early after confinement is not attended with any injurious effects either to the mother's health in general or to the secretion of milk in particular, and there are at the present moment several women in the house who were vaccinated at early periods after their confinement, and who now, months afterwards, have a plentiful supply of milk, which at no time has been interfered with by the vaccination. 6. A few years ago a case of confluent small-pox occurred in a patient in the lying-in wards who had been recently admitted, and who had certainly not contracted the disease in the workhouse. I then vaccinated all the other patients, there being no spread of the disease. Anticipating the possibility of a similar occurrence in the future, I have ever since considered it my duty as a public officer, and as one responsible for the maintenance of the health of the wards, to vaccinate or revaccinate all the patients as soon as possible, when there was no medical reason to the contrary, for in my opinion it would be infinitely more "inhuman" to allow small-pox to ravage a lying-in ward than to have each of the patients presenting a healthy vaccinated arm—a condition which would prevent such a calamity.

Allow me to add here the well-known fact that women in the lying-in state are peculiarly predisposed to contagious influences, and that, if at that time they are attacked with small-pox, they almost certainly die unless protected by efficient vaccination. In conclusion, there was no evidence to show that vaccination either directly or indirectly had anything whatever to do with the death of the child, but that, on the contrary, there was every evidence to prove that it actually died from the want of proper nourishment.

Yours faithfully,

W. M. DUNLOP, M.B.,

Resident Medical Officer, St. Pancras Workhouse, N.W.

May 29th, 1883.

P.S.—The absurd theory was propounded at the inquest that the vaccination of the mother caused her milk to subside through shock. She left the workhouse three weeks after vaccination with her breasts full of milk, having made an excellent recovery, and the vaccinated place on the arm covered with a dry scab.

ADMISSION OF CASES OF ERYSIPELAS INTO HOSPITALS.

To the Editor of THE LANCET.

SIR,—In answer to Mr. Holmes's letter in the current number of THE LANCET, I can give the management of cases of erysipelas in our small country union hospital, with its results. I will first state that the larger portion of the hospital is newly erected on the most approved principles, and that the wards are spacious and well ventilated. The older portion of the hospital is also well constructed. The whole, situated in an open, salubrious country district, is the infirmary for the sick of the Staines Union Workhouse, containing 300 inmates, with a complement of 120 constantly sick. During the past two years sixteen cases of erysipelas have been treated, eight of each sex; of these three were admitted with the disease, whilst four were traced to infection; the remaining nine occurred in patients having a constitutional predisposition to the disease, or from insanitary causes. The medical officer, Mr. Curtis, with myself, holding the doctrine of the contagiousness of erysipelas, has always insisted upon the early isolation of every case, as much as possible in a separate ward. The cases admitted from without were all severe, and one died three days after my first seeing him. But from the two which recovered the infection spread, so that three more cases followed, but were restricted to the nurses who waited upon them, and one of these, an excellent nurse, died. The remaining case of infection was caught from sleeping in the adjoining bed to one of the inmates ill with the disease before her removal to the isolated ward.

I will not now trouble you with my medicinal treatment of the disease, but I will make one more observation as to the cause of the complaint. It has struck my attention how many of the intemperate are attacked with the disease, and in such cases the withholding the usual stimulant is an important element.

I am, Sir, yours faithfully,

Staines, May 29th, 1883. HENRY APPLETON.

ELASTIC COMPRESSION IN AMPUTATION OF THE HIP-JOINT.

To the Editor of THE LANCET.

SIR,—The method of controlling hæmorrhage by elastic compression in amputation of the hip-joint, as noticed by Mr. Jordan Lloyd in your last number, is of great value. We have used it in the Huddersfield Infirmary for some years past both in amputations of the hip- and shoulder-joints, not with elastic bandage, as described by Mr. Lloyd, but with the rounded solid rubber. In amputation of the hip-joint we have generally combined with it the abdominal tourniquet, as a protection in case of any accident to the rubber; but if placed in the hands of an intelligent assistant, who can alter or vary the pressure as required, scarcely a drop of blood need be lost. It should always, I think, be entrusted to an assistant, who will find it useful to employ the piece of wood, as suggested by Mr. Lloyd, to moderate the cramping action of the rubber. Although a great many operations have been performed in this way, I have not seen any injurious influence from the constriction of the solid rubber, and I think myself it is more convenient for use than the rubber bandage. The same procedure applies equally well to amputation of the shoulder-joint, but the cord should not be so thick as it requires to be in amputation of the hip-joint in the adult. I hardly think, in cases of excision of the hip-joint, that elastic compression is required. I have excised the hip five times within the last three months, and in no case was much blood lost, though no means were used to prevent it but sponge pressure or tying the vessel, and there would probably be more blood lost from venous sources if the ligature were used.

I am, Sir, yours faithfully,

Huddersfield, May 29th, 1883. SAMUEL KNAGGS.

LIVERPOOL.

(*From our own Correspondent.*)

HOSPITAL SATURDAY AND SUNDAY.

THE last Saturday in April was observed this year as Hospital Saturday, and the sum collected up to the present date (May 29th) amounts to nearly £2500. The Sunday collections were somewhat in advance of last year, hence there is every reason to expect that the yearly average of £10,000 from the combined institutions will be maintained. It is not improbable that in the course of time some systematised mode of weekly or monthly collections among the working classes may be arranged. A farthing a week from each working man would relieve the local hospitals from debt, and their managers from much anxiety.

DEATH OF A SURGEON FROM TYPHUS FEVER.

Another victim has been added to the numerous roll of medical practitioners who in the zealous discharge of their duties have contracted typhus fever and succumbed to its deadly influences. Dr. Henry Francis Fisher was one of the parochial medical officers, and had charge of one of the north end districts, in which are a large number of the poorer classes in wretched dwellings. His illness was of very short duration, and the news of his death was received with sincere regret, his genial bearing having endeared him to a large circle of professional and other friends.

THE LOCK HOSPITAL AND VENEREAL DISEASES.

The necessity of a lock hospital here is well illustrated by a recent occurrence. The annual cleansing, whitewashing,

and painting of the Lock Hospital having been decided upon, it was resolved by the surgeons to close the male wards but to retain all the female cases, and to admit any women severely diseased. When the male wards were opened on May 21st cases came in so rapidly that by the 27th Dr. Bernard had his ward, containing twelve beds, filled. On the 28th and 29th five more cases were admitted into another ward under Mr. F. W. Lowndes, and it is most probable that the whole number of twenty-five beds will soon be occupied. On the female side there are seventeen patients and eight empty beds.

THE INFIRMARY SITE QUESTION.

Though the City Council resolved, by a decided majority, to grant a considerable addition to the site of the present infirmary, in the shape of an adjoining piece of land at present covered with buildings, the proposal meets with opposition and is the subject of keen discussion in the papers. It was proposed to relegate the infirmary to a site distant 700 yards (direct) from the present site and from the School of Medicine. But this being found to be quite out of the question, it is now proposed to move the University College there, one proposer, an influential city councillor, arguing that it is no hardship for students to have to walk such a distance between college and hospital. Fortunately for all concerned, Dr. Arthur Gamgee, Professor of Physiology and Dean of the medical department in Owens College, Manchester, in a letter published in the local papers, is able to answer the question from the inexorable logic of facts. The distance between Owens College and the Royal Infirmary is a most serious drawback, causing much annoyance and great waste of time. Such authoritative evidence ought to set the question at rest.

LYING-IN HOSPITAL, MATERNITY CHARITIES, AND HOSPITALS FOR WOMEN.

For many years the only maternity charity in Liverpool was the Ladies' Charity, which provided poor married women with the attendance of a skilled midwife, and if necessary a surgeon also, in addition to small pecuniary and other assistance. It was, however, a *sine quâ non* that before being entitled to relief each patient should have two living children. Thus primiparæ were excluded, and it was this and other circumstances which led to the establishment of the Lying-in Hospital nearly forty years ago. These two charities, having to a great extent kindred objects, were amalgamated in 1869. But they have again become separated, owing to differences among the members of the committee and the subscribers. Some were in favour of closing altogether the lying-in wards, and of making the hospital entirely one for the diseases peculiar to women. Others, again, maintained that in so large a city a maternity hospital was necessary, and that the Thornton wards of the Royal Infirmary provided sufficiently for the diseases of women. A third party were in favour of the special hospital scheme, with a lying in ward in a detached but contiguous building. At present matters are in a transition state. The Lying-in Hospital, which was built in 1862, has been sold to the committee of the Hospital for Cancer and Skin Diseases; several houses have been secured for a Hospital for Women; and it is understood that a new Lying-in Hospital is to be erected somewhere in the centre of the city.

NEWCASTLE-ON-TYNE.

(*From our own Correspondent.*)

UNIVERSITY OF DURHAM.

AN analysis of the late examinations held in the Newcastle College of Medicine for degrees in the University of Durham shows that 56 candidates presented themselves for examination, of whom 55 entered for the First M.B. Of these 55, two came up for chemistry only, having previously passed in anatomy, physiology, and botany, and both satisfied the examiners; 53 entered their names for all subjects—viz., anatomy, physiology, chemistry, and botany. Of these 53, 19 satisfied the examiners in all subjects, 2 taking second-class honours; 13 were rejected in all subjects, 8 in chemistry, only 4 in botany; one retired from the examination, and 8 failed to present themselves for examination. There was one candidate for proficiency in sanitary science, and he succeeded in satisfying the examiners.

PRUDHOE CONVALESCENT HOME.

At the annual meeting of this excellent institution held recently, it was stated in the medical report that during the year 1136 cases had been treated, which showed a considerable increase on the admissions of former years, and with the following results:—Cured, 739; greatly benefited, 337; somewhat better, 45; in *statu quo*, 13; died, 2. The Bishop of Newcastle, who presided, made a powerful appeal in aid of the institution, and was ably seconded by the Mayor.

DOCTORS AND JURIES.

A writer in the *Sunderland Herald and Daily Post* very properly takes exception and protests against the heading in that paper (sometimes observed in other papers also) of "A doctor censured"; and he requests that the editor, when he describes any annoyance that his professional brethren may be subject to in this way, will do by them as if they were lawyers, pointing out that a paragraph may be seen in the same paper headed, "Extraordinary scene at an assizes; a prisoner threatening a judge," which explains who the learned judge was threatened by, and thus does not cause any alarm for his safety. The writer suggests that if the editor had headed the paragraph about the doctor in the same way, such as "Extraordinary scene at an inquest; a jury censuring a Sunderland doctor," readers would at once know what value to attach to the word "censure," which, in ordinary language, conveys the idea of blame. The writer further points out a fact which is sometimes overlooked—namely, that a coroner's jury is summoned to find and declare the cause of death, and not to sit in judgment on a person who has not the opportunity of being present to explain in a satisfactory manner that part of his conduct with which they choose to find fault.

SIR WILLIAM ARMSTRONG'S LATEST GIFT.

Sir William Armstrong has made a further gift—to supplement his recent one of Jesmond Park Dene—of about eighteen acres and a half to the citizens of Newcastle. This magnificent addition will make the benefaction of land to us by Sir William amount to a total of seventy acres, so that we may say we possess one of the finest city parks in this or any other country.

Newcastle-upon-Tyne, May 23rd, 1883.

SCOTTISH NOTES.

(*From our own Correspondent.*)

ST. ANDREWS UNIVERSITY.

As is not unusual when outside interference is threatened, the friends of St. Andrews have been constrained to action of an energetic and hopeful kind. Probably when the Universities (Scotland) Bill is again brought before the Commons, it will be found that the clauses objected to by St. Andrews have been withdrawn; but none the less will it be true that these proposals deserve credit for stirring the dry bones of the place and eliciting help from the friends of the ancient university. Already two subscriptions of £1000 each have been promised; it is felt that £5000 may be raised in the county of Fife, and as soon as the locality more directly concerned has shown sufficient interest a widespread appeal will be made for the necessary funds. In any case, all this unwonted stir will end in good to St. Andrews.

THE MEDICAL JURISPRUDENCE CHAIR AT ABERDEEN.

Since last writing two new names—Dr. Urquhart, Aberdeen, and Dr. Matthew Haig, Edinburgh—are mentioned as candidates for the above vacancy, so that the University Court will have no lack of numbers from which to make choice. At present it is believed that the selection will be made in Aberdeen, and Drs. Beveridge, Angus Fraser, and Frank Ogston are supposed virtually to form a short list. It has long been felt by those who know Aberdeen intimately that a recognised place in the teaching staff should ere this have been found for Dr. Beveridge, a man who might be designated the Jonathan Hutchinson of the North, and

probably capable of teaching with credit to himself any subject in the curriculum. His exact method and wide knowledge would be peculiarly valuable to the professor of medical jurisprudence, while his admirably clear style in teaching would be of great advantage to the students. During the past week the students have in large numbers signed a very warmly expressed testimonial in favour of Dr. Angus Fraser, pointing to his known ability as a chemist, and his success as a clinical teacher, as evidence in his favour. Some years ago Dr. Fraser took the midwifery class at very short notice, and conducted it in such a manner as to command the heartiest thanks of his students. Besides his undoubted fitness for the place he now seeks, Dr. Fraser is also a great favourite personally; so that with two such men to choose from the University is sure to be well served. Dr. Francis Ogston has for several years assisted his father in the class, and is teacher of practical toxicology in the University.

THE CROFTERS COMMISSION.

When the names of the Royal Commissioners appointed to inquire into the condition of the people in the West Highlands were first announced, considerable dissatisfaction was expressed; but the manner of work adopted by these gentlemen has given them a high place in the opinion of the people of Scotland generally. So far, one would be inclined to suggest that too little attention has been given to the wretched health conditions under which the crofters live; but the personal inspection of the houses by the Commissioners will probably have a better effect than inconsequential statements in the witness-box. Occasional descriptions of the miserable hovels without windows or chimneys have been given, but the statement that the new and improved cottages on some estates are built at a total cost of £10 or £15 is perhaps the most eloquent testimony to the condition of things generally. It seems common to share the hovel with the "stirk," and such a filthy arrangement must be part of a system most detrimental to health. Want of milk is everywhere evident; tea is in far too common and increasing use; and oatmeal as porridge, but without milk, has frequently to be depended on for sustenance. Altogether the chances of health are reduced to a minimum, and probably out-door life is the one element favourable to a longevity which seems not uncommon. Life under such circumstances is a mere existence, and, according to the evidence of Dr. Fraser, it is usually associated with dyspepsia, occasioned by the sameness and bad quality of the food. Rheumatism, scrofula, and lung disease are the other common manifestations of exposure and improper food. A statement by some of the medical men recently removed from these islands might be helpful to the Commissioners, as the dependence of the resident practitioners upon local magnates is not conducive to a full and free expression of opinion. The Commissioners would at once see the high value rightly attaching to such evidence.

IRELAND.

(From our own Correspondent.)

THE COLLEGE OF PHYSICIANS IN IRELAND AND THE MEDICAL BILL.

THE College having carefully considered this Bill for the consolidation and amendment of the law relating to medical practitioners have come to certain conclusions in reference to some of the clauses of the Bill. Clause 9 deals with the formation of Medical Boards for each division of the United Kingdom, and the importance of the College of Physicians was recognised in the Bill as originally presented to the House of Lords, for in it three representatives on the proposed Medical Board for Ireland were granted. Subsequently, however, the representation of the College was reduced to two members on the board, while that of the universities was increased from two to three members each. This alteration in representation places the College of Physicians in a position inferior to any of the other medical authorities constituting the proposed Medical Board for Ireland, and is thus calculated to inflict a serious injury on the College, and to lower the status of the Fellows, Members, and Licentiates. Among the 1696 medical practitioners in Ireland who hold Irish qualifications there are 718 licentiates of the College of Physicians, while about 600 licentiates are established in England and Wales, in addition to a large number who are either in the army or navy, or are settled in the colonies. Clause 10 entrusts the regulation of examinations to the Medical Board, subject to the control of the Medical Council, and of the Privy Council, but the College consider that the duty of framing rules and schemes for examination should be imposed on the Medical Council alone, and the clause should provide that the examination scheme in each division of the kingdom should represent uniformity or equality as regards curriculum of study, standard of examinations, and fees. This principle was endorsed in the Medical Act Amendment Bills of 1870, 1878, 1879, and 1880; and in accordance with these views the present clause and also Clauses 14, 19, 36, 41, and 53 will require amendment. Clause 36 deals with the expenses of the Act, and the funds to meet such expenses. In the opinion of the College, provision should be made for the application of a portion of the surplus of the Medical Board fund to the public purposes of the Medical Corporations of that part of the kingdom to which the Board belongs. Unless the surplus is so applied no adequate provision will exist for the maintenance of the Medical Corporations. The College also consider that the members of the different Medical Boards should serve without fee or reward, and that the provision in this clause for estimating the remuneration for the attendance of members of a Medical Board should be omitted.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

The annual elections for President, Vice-President, Secretary, and Council will take place next Monday, the 4th inst. Besides the outgoing members who will offer themselves for re-election the following gentlemen will compete for a seat on the Council:—Mr. R. A. Hayes and Mr. Baker, of Steevens' Hospital; Mr. H. Fitzgibbon, City of Dublin Hospital; Mr. Kendal Franks, Adelaide; Mr. Carte, Royal Hospital; Mr. Coppinger, Mater Misericordiæ; Mr. J. B. Story, St. Mark's; Mr. Meldon, Jervis-street; and Dr. C. A. Cameron, Medical Superintendent Officer of Health for Dublin and Professor of Chemisry in the Royal College of Surgeons.

ADELAIDE HOSPITAL, DUBLIN.

The examinations for the Hudson Scholarship terminated last week, when Mr. J. H. Scott was awarded the prize, which consists of a gold medal and £30. The second prize, of a silver medal and £10, was obtained by Mr. J. F. Drury. There were five competitors.

Dr. Ambrose has been appointed coroner for the Western Division of the county Limerick.

PARIS.

(From our Paris Correspondent.)

THERE has been great disaffection among the hospital physicians and surgeons of Paris owing to the proposal, about a month ago, by the director of Public Assistance, to admit the recently appointed hospital accoucheurs to the board of examiners for the post of hospital physicians and surgeons, which is composed exclusively of these officers. The hospital physicians and surgeons protested against this innovation on the grounds of its being inexpedient, and of the accoucheurs not possessing all the qualifications necessary to meet the requirements of general hospitals. Whereupon the director of Public Assistance appointed a committee, composed of twelve members, to investigate the subject, and it was decided by eight votes against two that the innovation should be sanctioned. This decision, which was approved by the director, who has the entire control over the internal management of the hospitals, only aggravated the affair; and Dr. Moutard-Martin, who represented the hospital physicians, and Dr. Nicaise the hospital surgeons, in the Council of the Public Assistance Board sent in their resignation. Nothing has since been heard of the affair, and it would appear that the storm has blown over, that the wrath of the hospital physicians and surgeons has cooled down, and that the accoucheurs and other specialists will be

allowed to take part in the examinations for hospital appointments, with the understanding, however, that they will confine themselves to their respective specialities. I may mention that the Council of the Assistance Publique is composed of twenty members chosen from the Council of State, the Court of Appeal, professors of the different Faculties, and Directors of Hospitals. The Prefects of the Seine and of Police are also members by virtue of their offices. The Council meets once a week, when all questions concerning the administration are submitted to it, but no decision is considered final unless approved of by the Minister of the Interior.

It will be recollected that some three or four months ago Professor Brown-Séquard submitted a paper to the Academy of Sciences giving the results of some experiments he had performed on some animals with carbonic acid gas, which he applied to the larynx, and thus produced local anæsthesia, with the view of facilitating certain operations on that organ, and without causing any pain to the subject. On Tuesday last, while the professor was giving practical demonstrations of these experiments on a monkey, in the presence of a rather large mixed audience at the College of France, a rather sensitive lady, moved with indignation, left her seat, went straight to the Professor, and struck him a blow with her umbrella, which, of course, rather astonished him, but, without losing his equanimity, he had the lady removed from the amphitheatre and given over to the police. Here she endeavoured to establish that the law for the protection of animals was on her side, which the Commissary of Police admitted for the time, but he did not see that this justified her conduct, and that at any rate she had no right to take the law into her own hands. She is therefore to be tried for the assault, and it is anticipated that this will give rise to new legislative measures for regulating the practice of vivisection in this country. It is to be remarked that the medical journals are rather silent on the incident, but the local newspapers have taken it up, some being for and others against vivisection; but all are unanimous in asserting that if it is necessary for the furtherance of science it need not be made a spectacle of, and should be confined to members of the profession. In France, however, this would be somewhat difficult to manage, as all lectures in the Government institutions are open to the public; but what may be done is that in similar circumstances as the present the lecturer may request over-sensitive persons to leave the amphitheatre. Professor Brown-Séquard deserves great credit for his perseverance, and, nothing daunted, he is determined to continue his interesting experiments. He has this time selected monkeys for his subjects as being the nearest approach to man in their conformation, and thus hopes that in sacrificing a few more monkeys he will render service to humanity.

Suicides and homicides seem to be on the increase in Paris, as for the last few days the Morgue has been full of dead bodies; and on one day alone there were no less than twenty-nine to be seen in it.

To give your readers an idea of the quantity of sodawater or, as it is called, "eau de Seltz," that is drunk in the hospitals in Paris alone, I may mention that the Director of Public Assistance has advertised for contractors to furnish for one year 140,000 "siphons" for the use of the patients.

M. Le Royer, the President of the French Senate has been laid up for some time with pleuro-pneumonia. The right lung was first attacked and got well; but unfortunately the left one has become similarly affected, and the prognosis is considered very unfavourable.

Obituary.

THOMAS WILLIAM CATTELL, M.R.C.S., L.S.A.

MR. THOMAS WILLIAM CATTELL was the son of the late Mr. Thomas Cattell of Coventry, in which city he was born June 26th, 1809, though of Northamptonshire descent. He received his early education privately, and about 1823 was apprenticed to Mr. Alexander Dewar, a surgeon, formerly of the Royal Navy, practising at Winkfield, Berks. In October, 1829, he commenced his studies at St. Bartholomew's, becoming L.S.A. on Jan. 23rd, 1831, and M.R.C.S. on Nov. 25th in the same year. From 1832 to 1837 he was successively with Mr. Michael Morrah of Worthing, Mr. Dewar, and Mr. Boddington of Erdington, near Birmingham. In the latter year he removed to Liverpool, where he followed the practice of his profession with assiduity and success, until July, 1863, when he retired, and from then until his wife's death generally resided in London. For some years past he lived at King's Stanley, Gloucestershire, where he died on April 24th last, in his seventy-fourth year, and on the 28th was buried in the churchyard of that village. He married in 1864 Miss M. A. Bromley, who died in 1871, leaving no issue. Mr. Cattell was of a retiring and unassuming disposition, and was therefore not well known; but by the few with whom he was intimately acquainted his kindly and genial disposition was greatly valued. Shortly after his retirement an accidental inquiry turned his attention to genealogy, a pursuit which he zealously followed until a few days before his death. He was a careful and accurate worker and his collections relating to his own name, that of Clutterbuck, and a few other families, are probably unique in their fulness, and, with his extensive notes upon the neighbourhood of Kilsby, Northants, and King's Stanley, form a remarkable monument of his industry and learning.

JARDINE MURRAY, F.R.C.S. ED., M.R.C.S. ENG.

THE medical profession and others at Brighton were startled on Tuesday by the announcement of the unexpected and somewhat sudden decease of the above gentleman, at a comparatively early age. Mr. Jardine Murray commenced his profession as a partner of the late Mr. Oldham, with whom he was associated for some years. For a long time he carried on an extensive and lucrative practice. He was Hon. Secretary, and afterwards President, of the Brighton and Sussex Medico-Chirurgical Society; also for some years surgeon to the Brighton and Sussex Eye Infirmary. He was much esteemed professionally and socially. On Thursday, the 24th ult., he saw his patients as usual, but felt unwell on the following day, and symptoms of severe pneumonia soon appeared. Mr. Murray was seen, we believe, by Dr. Wilson FOX. The severity of the symptoms became rapidly more urgent, and he died on the following Tuesday. He leaves a wife, but no family.

J. BEADNELL GILL, M.D. ST. AND., M.R.C.P. ED.

DR. JOHN B. GILL, whose death at Canterbury we had to record on May 19th, was formerly in practice at Dover, and had filled the office of surgeon at the hospital in that town, as well as the posts of medical officer of health of Sandgate and physician to the Folkestone Dispensary and Infirmary. On leaving Dover he practised for a time in Folkestone, subsequently removing to Canterbury. Dr. Gill had been in failing health for some years, but latterly had suffered more acutely, though almost to the last he continued his public and professional work. He was a man who commanded the respect and esteem of all who knew him, and his comparatively early death has cast a deep gloom over the neighbourhood which formed the sphere of his active and useful labours. He has left a widow and a large family of young children.

MEDICAL NOTES IN PARLIAMENT.

IN the House of Lords on Friday, May 25th, the Medical Act Amendment Bill (1858) was read a third time and passed. The object of this Bill is to empower the Royal University of Ireland to elect one person to be a member of the General Medical Council in the same manner as the Queen's University in Ireland exercised the right until its dissolution.

Petitions.

Amongst the petitions presented to the House of Commons during the week have been the following: From certain registered medical practitioners in favour of the Medical Bill; from the Foreign Graduates' Association, for amendment of the Bill; from the King and Queen's College of Physicians, Ireland, for fuller representation; from the Fifeshire Medical Association, for amendment of the Scotch Universities Bill; from the Plymouth Board of Guardians, for preservation of compulsory vaccination; from the Royal Hospital for Incurables,

the Royal Free Hospital, Ventnor Hospital, and Westminster Hospital, against the Charitable Trusts Bill; from Apothecaries' Hall, Ireland, for power to elect one member on the local Medical Board under the new Bill; from Brighton, against the Infectious Diseases Notification Bill; from Hythe Justices of the Peace and Alverstoke Board of Guardians, against alteration of the Contagious Diseases Acts; from the Manchester and Salford Sanitary Association, for an Act to secure the competence of persons practising midwifery; and from the Royal College of Surgeons, Edinburgh, for amendment of the Medical Bill.

On Thursday, the 24th ult., the annual return of the inspector's report on experiments on living animals was presented, and ordered to lie on the table.

The Army Medical Inquiry.

On Friday and Tuesday, questions arising out of the publication by *The Times* of fragments of the report of the War Office Committee were put by Dr. Cameron, and in each case detailed replies were postponed, pending the distribution of copies of the report, which began on Tuesday.

The Indian Medical Service.

Mr. Leamy asked the Under Secretary of State for India whether his attention had been called to the grave cause for dissatisfaction given to the junior members of the Indian Medical Service by the enormous percentage of them at present on "unemployed pay;" whether the "unemployed pay" of a surgeon in the Indian Medical Service—namely, 286·10 rupees per month was not the lowest scale of pay awarded to any commissioned or covenanted officer in the Indian Service; and whether the Government intended to take any steps to remove this grievance, and to fulfil the terms of the printed conditions upon which men have been induced to enter the service.—Mr. Cross: The attention of the Secretary of State has been called to the exceptionally large number of junior medical officers in India drawing what is called unemployed pay. This is due partly to the unusually small number of medical officers at present absent from India on furlough, partly to the large number of young officers admitted to the service consequent on the Afghan war, and partly to the recent reduction of 22 native regiments, with the consequent reduction of the medical staff attached to regiments. The unemployed pay of a surgeon in the Indian Medical Service is not the lowest awarded to any covenanted or commissioned officer in the Indian Service. An unemployed lieutenant would draw 256 rupees a month while an unemployed surgeon, if under five years' service, would draw 286 rupees, or, if over five years' service, 304 rupees a month. The present difficulty is being met by a large decrease in the number of appointments, there having been 18 for last year and 13 for this; as compared with 39 and 49 for the two preceding years. The published conditions under which officers accept employment in the Indian Medical Service are accurately fulfilled.

Removal of Irish Lunatics.

The Lord Advocate, replying to Mr. Corbet, stated that Hugh Flannagan was removed on Dec. 21st, 1882, from Greenock Parochial Asylum to Londonderry Workhouse. He was shortly discharged from the workhouse, and then went home and murdered his father. He was removed from Greenock under a warrant signed by the justices. The authority for transferring an insane pauper from Scotland to Ireland did not rest with the Scotch Lunacy Board. That board considered the present arrangements unsatisfactory. A lunatic ought not to be removed to a workhouse, but to an asylum, or at least sufficient notice of the removal ought to be given to some Irish authority. The rule was to hand a written statement of the pauper's condition to the Irish local authorities, which ought to be a sufficient security against his being released when not in a fit condition. He was not prepared to say that without legislation they could insist on further precautions, but he would consider what could be done.

St. Pancras Workhouse.

Sir C. Dilke, in reply to Mr. P. A. Taylor, said he had written for the depositions of a recent inquest upon a child at St. Pancras Workhouse. He was not aware that Dr. Dunlop had stated that it was the practice in that workhouse "to revaccinate women in the first few days after their confinement, and even on the day of confinement itself, if that should happen to be the weekly vaccination day." The Local Government Board had neither ordered nor suggested such a practice.

On Tuesday, Mr. Spears' report on Nazareth House was presented. On Wednesday, the second reading of the Infectious Diseases Notification Bill was further deferred for a week; as also was the Public Health Acts Amendment Bill. The Medical Bill stands for second reading on Monday next.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the first part of the Professional Examination for the Fellowship at meetings of the Board of Examiners on the 24th and 25th ult.:—

Henry Secker Walker, University College; Albert Robert Jolliffe, Charing-cross; George Lee Wells, Leeds and St. Bartholomew's; Charles Harry East, King's College; James Harry Ernest Brock, University College: Reginald Maurice Henry Randall, Guy's; Harry Marmaduke Page, St. George's; Bernard Castle, St. Bartholomew's; Joseph George Harsant, Guy's; Herbert Fox, St. Bartholomew's; John Walker Carr, University College; William Chas Bull, Cambridge and St. George's; Charles Joseph Heath, St. Bartholomew's; Edgar Herbert Thane, University College; George Palmerston Newbolt, St. Bartholomew's; William Kelynack Dale, King's College; James Edward Williams, St. Bartholomew's; Robert Chambers Priestley, Cambridge and King's College; Philip Robt. Wm. Santi, St. Bartholomew's.

Of the 86 candidates who were examined, 43 failed to satisfy the Board, and were referred for six months' further anatomical and physiological study.

COLLEGE OF PHYSICIANS IN IRELAND.—At the May examinations the following candidates obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—Alfred John Charlick, Jones Henry Davis, Paul Robert Dillon, Richard Thacker King, Herbert Harrison Marsden, John Latimer Parke, Robert Dixon Patterson, Henry Robinson, Thomas Wetherall Sproulle, John Joseph Todd, George Albert Walpole, William Henry Waterfield, Edward Wynne.

MIDWIFERY.—Alfred John Charlick, Jones Henry Davis, Paul Robert Dillon, Arthur Wellington Fenton, Richard Thacker King, Herbert Harrison Marsden, John Latimer Parke, Robert Dixon Patterson, Henry Robinson, Samuel Alex. Swan, John Joseph Todd, William Henry Waterfield, Edward Wynne.

APOTHECARIES' HALL.—The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on May 24th:—

Dodson, Arthur Edward, Downs-park-road, Clapton.
Parke, John Latimer, Tideswell, near Sheffield.
Spiller, Frederic Winstanley, Belgravia-road, Birmingham.

The following gentleman also on the same day passed the Primary Professional Examination:—

Harris, Chas. Joshua Joseph, Charing-cross Hospital.

A LADY residing near Stratford-on-Avon has given £6000 towards the erection of a new infirmary in the town.

A BRISTOL ANTI-VACCINATIONIST.—Mr. E. J. Neale, of Cotham-park, was on Wednesday fined £6 and costs, amounting in all to £7 13*s.*, for the non-vaccination of six of his children. He has previous to this paid about £90 in fines and costs in Bristol for the same children.

A PETITION has been presented to the Queen in Council praying for the grant of a charter for the incorporation of the President and Governors of Charing-cross Hospital. The petition is to be taken into consideration by a committee of the Privy Council on June 30th next.

THE SANITARY INSTITUTION OF GREAT BRITAIN.—A meeting of the local committee appointed in connexion with the meeting of the Sanitary Institute of Great Britain, which commences in Glasgow on September 25th, was held last week. The President has not yet been chosen, but the Presidents of Sections have been appointed as follows:—Sanitary Science and Preventive Medicine, Professor Gairdner, Glasgow; Engineering and Architecture, Professor Thomas Rogers Smith; Chemistry, Meteorology, and Geology, Dr. R. Angus Smith, Manchester. In addition to the opening and sectional meetings, a lecture will be delivered by Dr. Carpenter, a conversazione will be given to the members by the corporation of Glasgow, and excursions will be made to various places of interest in the neighbourhood. In connexion with the Congress, an exhibition of sanitary appliances will be held, and this exhibition it is intended to keep open until the middle of October, although the Congress terminates on September 29th.

DEACONESSES' TRAINING HOSPITAL. — At the fifteenth annual meeting of the subscribers to this institution, held on the 26th ult., it was stated that the ever-increasing demand for sisters for private nursing could with difficulty be met. The income for the year was £2707, and the expenditure had amounted to £2614. The meeting was held in the grounds of the hospital at Tottenham, and Mr. S. Morley, M.P., who occupied the chair, laid the memorial stone of a new infants' ward. The building which is now being erected is estimated to cost £6000, and it is intended to build three other blocks as soon as the funds permit.

WOODLANDS CONVALESCENT HOME.—At a meeting of the subscribers to this home held recently a committee was elected to manage the institution. It was founded by the late Sir Henry Ripley, and since it was opened in 1877 the late baronet, aided by an experienced matron, superintended it in person. In 1878, when the work of the home practically commenced, there were not more than 168 patients, while the succeeding year only brought an increase of 5. In 1880, 504 persons were accommodated; in 1881, the number of inmates was 701, and last year 815. The recommendation of a subscriber of a guinea entitles a patient to maintenance for three weeks; and though the home was originally designed for the benefit of Bradford, patients are now received from all parts.

THE HOME HOSPITALS ASSOCIATION.—The fifth meeting of the governors and members of the Home Hospitals Association for Paying Patients was held on Wednesday in the rooms of the Social Science Association, the Duke of Northumberland, President, in the chair. The report stated that during the past year it had been found necessary to double the amount of accommodation originally provided. The houses in Fitzroy-square, now devoted to the purposes of the Association, were regarded as complete in their sanitary arrangements. Since November last, when patients were first admitted, the whole of the twenty-four beds had been almost continuously occupied, while many applicants were waiting for admission. The total number of applications for admission had been 479, of which 139 cases had been admitted. The amount received from paying patients during the past twelvemonth had been £2670; donations and subscriptions £3100. The expenditure had during the same period been £2721. The balance of the general fund now stood at £5353.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ANGELL, Mr. ARTHUR, has been appointed Public Analyst for the City of London, vice Earle, resigned.

ANSTED, H. L., M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer to the Madras Railway Company, in Madras.

BLAKENEY, EDW. THOS., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Surgeon to the Roscommon County Infirmary, vice Peyton, deceased.

CATER, J. RUNDLE, M.R.C.S., has been appointed Resident Obstetric Officer in St. Mary's Hospital, vice E. Archer Wood.

CRANSTONE, WILLIAM LEFEVRE, M.R.C.S., L.S.A.Lond., has been appointed Resident Medical Officer to the Peak Downs Hospital, Clermont, Queensland.

HOWELL, J. BROMLEY, M.R.C.S., has been appointed Resident Clinical Assistant to the Brompton Hospital for Consumption and Diseases of the Chest.

MACAULAY, F. E., M.R.C.S. & L.S.A.Lond., has been appointed Honorary Surgeon to the Halifax Infirmary, vice A. Jubb, resigned.

MCCREERY, JAMES VERNON, L.R.C.S.I., has been appointed Medical Superintendent of the Metropolitan Lunatic Asylum, Kew, Victoria.

MCKELLAR, E. D. MONTGOMERIE, M.D., M.Ch.Glas., has been appointed House-Surgeon to the Provincial Hospital, Auckland, New Zealand.

MACKEW, S., M.B Ed., has been appointed House-Surgeon to the Hertford British Hospital, Rue de Villiers, Paris.

MANSELL, E. R., M.R.C.S., has been appointed Assistant-Surgeon to the East Sussex, Hastings, and St. Leonards Infirmary.

MARSH, RYDING, M.B.Lond., M.R.C.S., has been appointed House-Surgeon to the Royal Alexandra Hospital for Sick Children, Brighton.

O'KEEFFE, WILLIAM, M.D., M.Ch., & L.M., has been appointed Senior Resident Medical Officer to the Bury St. Edmunds Friendly Societies' Medical Aid Association, vice F. V. Sandford. [In place of last week's announcement.]

O'MULLANE, Mr. THOMAS, has been appointed Assistant Medical Officer to the Bury St. Edmunds Friendly Societies' Medical Aid Association.

OPENSHAW, T. HORROCKS, M.R.C.S., L.S.A.Lond., has been appointed Senior House-Surgeon to the Poplar Hospital, vice Walter F. Dale, resigned.

PHILLIPS, H. H., M.D., L.R.C.S.I., has been appointed Surgeon to the Reading District of the Great Western Railway, vice F. A. Bulley, F.R.C.S., deceased.

PRYCE, EVAN W., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Pontefract District and Workhouse of the Pontefract Union.

TEMPLE, THOMAS CAMERON, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Shitlington District of the Ampthill Union.

VALENTINE, EDMUND WILLIAM, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Second District of the Langport Union.

VOS, G. HERKLOTS, B.A.Cantab., M.R.C.S., has been appointed House-Surgeon to the Training Hospital, Tottenham.

WESTBROOK, ERNEST, L.R.C.P., L.R.C.S., has been appointed Assistant House-Surgeon to the Poplar Hospital, vice Allan Perry, resigned.

WILLETT, G. GILMORE DRAKE, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Second District of the Bristol Incorporation.

Births, Marriages, and Deaths.

BIRTHS.

BRISBANE.—On the 24th ult., at Park-road, Regent's-park, N.W., the wife of J. Brisbane, M.D., of a son.

LUNN.—On the 19th ult., the wife of John R. Lunn, Medical Superintendent of the Marylebone Infirmary, Notting-hill, W., of a son, who only survived his birth a few hours.

LYONS.—On the 29th April, 1883, at Sanawar, Punjab, the wife of Surgeon-Major R. T. Lyons, M.D., of a daughter.

MAISEY.—On the 21st ult., at Charlbury, Oxfordshire, the wife of F. T. Maisey, M.R.C.S., of a daughter.

SHELDON.—On the 25th ult., at Cornwall-road, Notting-hill, W., the wife of Thomas Sheldon, M.D., of a daughter, still-born.

WARNER.—On the 27th ult., at Oaklands, Woodford, Essex, the wife of Percy Warner, L.R.C.P., M.R.C.S., of a daughter.

MARRIAGES.

EDWARDES—DONALDSON.—On the 5th ult., at St. Mary's, Bryanston-square, W., by the Rev. E. G. Peekover, M.A., Vicar of Horley, Edward Joshua Edwardes, M.D.Lond., M.R.C.P.Lond., of Orchard-street, W., son of Thomas Edwardes, F.R.C.S.Eng., of Glascoed, Montgomeryshire, to Clara Annie, daughter of J. Hunter Donaldson, Esq., of Southwick-crescent, W., and Harolds-Lea, Horley, Surrey.

KNOWLING—FOX.—On the 24th ult., at the Parish Church, Wellington, Somerset, by the Rev. Prebendary Knowling, M.A., Vicar, Ernest M. Knowling, B.A., M.B.Cantab., M.R.C.S.E., of 5, Lexden-terrace, Tenby, to Helen Emily Hankey, youngest daughter of the late George Smith Fox, Esq., of Wellington.

LOCK—STATHAM.—On the 21st ult., at St. Ann's, Wandsworth, John Griffith Lock, M.A. Trin. Coll. Cam., L.R.C.P., M.R.C.S., L.S.A.Lond., of South Cliff House, Tenby, to Irene Elizabeth, youngest surviving daughter of the late Rev. Richard Jervis Statham, Rector of Tarporley, Cheshire.

MOORE—MATTHEWS.—On the 24th ult., at St. Mary's Church, Torquay, by the Rev. A. B. Wrey, M.A., Vicar, York T. G. Moore, L.R.C.P.Ed., M.R.C.S., son of the late York James Moore, M.R.C.S., to Edith Elfrida, daughter of E. J. Matthews, of Babbicombe, Torquay.

MORLEY—HAWKINS.—On the 23rd ult., at Above Bar Congregational Church, Southampton, Thomas Simmons Morley, M.D.Lond., of Barton-upon-Humber, son of John Morley, M.R.C.S., L.S.A.Lond., to Jessie, second daughter of the late Edward Bishop Hawkins, of Blechynden-terrace, Southampton.

O'CONNOR—NOYES.—On the 24th ult., at the Church of St. Francis, Notting-hill, Bernard O'Connor, M.D., of Brook-street, son of the late William O'Connor, M.D., of Upper Montagu-street, to Mariquita, eldest daughter of the late Henry James Noyes, formerly 26th Cameronians.

DEATHS.

ALLINSON.—On the 27th ult., at King's Lynn, Anthony Allinson, M.R.C.S., in his 74th year.

ARNOTT.—On the 26th ult., at his residence, Stradbroke Villa, Gorleston, Great Yarmouth, Charles David Arnott, M.D.Edin., M.R.C.S., L.S.A.Lond., &c., in his 63rd year.

BLACK.—On the 29th ult., at Kensington-gardens-square, W., Francis Black, M.D., aged 64.

HANSON.—On the 22nd ult., while on a visit, at Llanthony, Herefordshire, George Henry Hanson, M.D., of Hampton-place, Brighton.

JOHNSON.—On the 26th ult., at Downham Market, John Felix Johnson, M.D., formerly Surgeon in the Royal Navy, aged 58.

MURRAY.—On the 28th ult., at Montpellier-road, Brighton, of inflammation of the lungs, John Jardine Murray, F.R.C.S.Ed., M.R.C.S., aged 48.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

Medical Diary for the ensuing Week.

Monday, June 4

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Mr. Henry Power, "On the Lachrymal Apparatus and Accessory Organs of the Eye."
ROYAL INSTITUTION.—5 P.M. General Monthly Meeting.

Tuesday, June 5.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—2 P.M. Annual Meeting.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION.—3 P.M. Professor McKendrick, "On Physiological Discovery."
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Dr. Garson, "On the Respiratory System of Reptiles and Birds."

Wednesday, June 6.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays, at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Mr. Frederic Samuel Eve, "On Cysts and Cystic Tumours in General."
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Dr. Elder, Dr. Grailly Hewitt, Dr. Potter, and others.—Dr. Herman, "On a Case of Acute Gangrene of the Vulva in an Adult."—Dr. Champneys, "On the Obstetrics of the Kyphotic Pelvis."
EPIDEMIOLOGICAL SOCIETY OF LONDON.—8 P.M. Annual General Meeting: to receive the Report of the Council for the Session 1882-83, and to elect Office-bearers for the ensuing Session.—Sir William R. E. Smart, "On the History of Fever in the Royal Navy."

Thursday, June 7.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.
ROYAL INSTITUTION.—3 P.M. Mr. R. S. Poole, "On Recent Discoveries in Cyprus and Asia Minor."
THE PARKES MUSEUM OF HYGIENE.—8 P.M. Dr. J. C. Steele, "On the Management of the Sick Room." The lecture will be illustrated by models.
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8½ P.M. Discussion on Eye Symptoms in Diseases of the Spinal Cord, introduced by Dr. Gowers. Communications or remarks are promised by the following gentlemen:—Dr. Hughlings-Jackson, Mr. Hutchinson, Dr. Walter Edmunds (Case of Sudden Failure of Sight in Locomotor Ataxy), Mr. Marcus Gunn, Mr. Lawford (Cases of Optic Atrophy in General Paralysis of the Insane, with Microscopical Sections), Dr. Bevan Lewis (Observations on the Pupil in Spinal Disease), and Dr. Sharkey (Cases of Optic Atrophy in Disseminated Sclerosis).—Living Specimens at 8 o'clock.

Friday, June 8

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Mr. Frederic Samuel Eve, "On Cysts and Cystic Tumours in General."
ROYAL INSTITUTION.—8 P.M. Professor Dewar, "On the Electric Arc and Chemical Synthesis."

Saturday, June 9.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Turner, "On Russian Social Life."

METEOROLOGICAL READINGS.

(Taken daily at 5.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, May 31st, 1883.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 5.30 A.M.
May 25	29·97	W.	60	56	106	76	53	..	Cloudy
,, 26	29·60	N.W.	50	57	98	69	55	..	Raining
,, 27	30·08	N.W.	57	53	105	70	49	0·19	Bright
,, 28	30·09	W.	50	51	114	71	48	0·15	Bright
,, 29	30·08	S.W.	64	57	123	73	51	..	Cloudy
,, 30	30·21	N.W.	56	51	99	65	49	..	Bright
,, 31	30·25	W.	61	53	110	71	49	..	Bright

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

APERIENT DRINKING.

ONE cannot fail to be struck with the large number of aperient waters that have been introduced to the notice of the public during the last few years. That these waters have an extensive sale there is no doubt, and many have obtained a well-deserved popularity. Not a year passes but a number of new aperient waters put in their claim for public patronage, and "the cry is still they come." There can be no doubt that from the way in which some of these medicines are "pushed" and advertised more people indulge in their use than have actual occasion for them. Dram-drinking is bad, and excessive tea-drinking is bad, but we think that medical men may say a word now and then against indiscriminate aperient-drinking. An aperient is not, as many think, a cure for every little malady that flesh is heir to, and to introduce an aperient as a feature of one's daily diet is not a step that should be lightly undertaken. Many of these waters are excellent and are of great service, but it would be well if their use were a little more under the control of those who are best acquainted with their action.

"WOMEN'S DRESS."

To the Editor of THE LANCET.

SIR,—As one of the earliest advocates of reform in women's dress, will you allow me to say a few words in reply to the paragraph on this subject in THE LANCET of May 26th?

The writer denounces the divided skirt as unnatural, and also as injurious to health, as being too hot. The first objection is simply untenable, as nature prov'des no clothing either for men or women, and what they drift into wearing seems a matter of chance, the women of many nations wearing trousers, and in a few others the men wearing some kind of petticoats. As to the other objection, the divided skirt is undoubtedly warmer, but between the knee and ankle only; and as this most desirable object is attained with less instead of more clothing round the hips, so that the weight is about one-tenth part what it was under the old system, there is no overheating such as is alluded to in the paragraph.

If, however, I have failed to grasp the meaning of the writer—and it is to clothing in trouser form in itself which he objects—then he differs from all other medical authorities on this point, as the wearing of woollen drawers is one of the things most constantly enjoined as essential to health for women and girls. The divided skirt, therefore, being much lighter than petticoats and looser than drawers, cannot possibly be injurious from any point of view.

I am, Sir, yours, &c.,

May 29th, 1883. A MEMBER OF THE RATIONAL DRESS SOCIETY.

ARE FALSE TEETH NECESSARIES?

AN interesting case bearing on the above question was recently decided before the Austrian district tribunal at Brüun. A dentist sued a gentleman of position for the cost of furnishing several false teeth to his recently deceased wife. The widower contended that the claim did not come within the scope of the befitting support which his wife was legally entitled to receive, and argued that, although medical services would be covered by legislative enactment, such was not the case with the offices of a dentist. The court, however, decided against him, on the grounds that mastication must be defective with a deficient number of teeth, and thus their replacement is a matter of necessity to the bodily health.

SIR HENRY THOMPSON ON CIGARETTE SMOKING.

To the Editor of THE LANCET.

SIR,—I think I might, if permitted, offer you a practical hint of some value in connexion with cigarette smoking, which I think is not altogether appreciated by the author of your notes on the subject.

First, the cigarette, without a mouthpiece, is really never smoked more than half way through in the East, where cigarettes are very cheap. It is well understood there, as it is by all practised cigarette smokers, that every inhalation from a cigarette slightly deteriorates in quality from the first. A small deposit of the very offensive oil of tobacco is deposited in the finely cut leaf, which acts as a strainer, and intercepts the deposit as it passes. Very little of this arrives in the smoker's mouth if he stops when half is consumed. I have seen many oriental smokers who consume no more than a third. Turkish ladies, for example, as I have had personal opportunities of observing at Constantinople, will smoke fifty or upwards in a day, but, I need scarcely say, only in the manner I have described.

Secondly, if a cigarette with a card mouthpiece is employed, the noxious matter may be intercepted by always introducing a light plug of cotton wool into the tube. If now the cigarette is nearly consumed, a considerable quantity of brown and very offensive matter will be found in the cotton wool, from the evil of which the smoker is thus preserved.

Thirdly. Some years ago I designed a cigarette-holder or mouthpiece, which opened transversely in the middle, disclosing a small cavity, which is filled with cotton wool. It would surprise many people, perhaps, to find that the result of smoking six cigarettes only in this tube is that this plug is saturated with a brown fluid like treacle, of powerfully offensive odour, and disagreeable almost beyond belief. The wool then requires to be changed, and in this manner the evil of smoking is very greatly diminished. Several of these were constructed by a well-known tobacconist close to your office in the Strand.

Lastly. The maximum of pernicious influence which occurs through cigarette smoking is attained by the practice of inhaling the smoke largely direct into the lungs, where it comes into immediate contact with the circulation, and the toxic effect is so strongly perceptible after three or four consecutive inhalations, and so felt by a sensitive person to the very tips of the fingers. I have no doubt that the effect would in most cases be notably recorded by the sphygmograph. Such smoking is of course, or ought to be, exceptional. All the fragrance, with a little only of the toxic effect, is obtained by admission of the smoke into the mouth only, still more by passing it through the passages of the pharynx and nose; but it is the pulmonary inhalation referred to, often associated with cigarette smoking, and rarely with the pipe, which constitutes the chief mischief of the cigarette. I may say, in passing, that that well-known oriental method of smoking, practised by means of the narghileh, in which the smoke, although drawn through water, passes invariably through the lungs, explains the powerful effects which sometimes unpleasantly surprise novices in its use.

Smoked, then, simply, and with cotton wool interposed, I do not hesitate to regard the cigarette as the least potent, and therefore the least injurious, form of tobacco smoking. Without this precaution it may be made, although not necessarily, the most ready means of conveying the active principle of tobacco, by means of smoke, into the system.

I am, Sir, yours truly,

Wimpole-street, W., May 28th, 1883. H. THOMPSON.

To the Editor of THE LANCET.

SIR,—With reference to the article in this week's LANCET on cigarette smoking, I should like, if you will allow me, to make a few remarks on that subject.

In your article you infer that smoking cigarettes in the foreign way does less harm than the English mode, because in the latter case the smoke is retained longer in the mouth. Now, I have lived for several years abroad, and I know that the French, Italians, Spaniards, Germans, and I have heard also that the Russians, "inhale" the smoke from the cigarette—that is, they swallow it, so that the smoker, after drawing down a whiff of smoke, can, if he chooses, speak, or even drink a glass of beer, and after that bring the smoke up again and eject it. This is their usual way of smoking cigarettes, but in London ten years ago, as far as I could see, "inhaling" was not much known, but I notice that the numbers here who now adopt it are increasing every year, and they, after having acquired the habit, will tell you that this is the only way they care to smoke a cigarette. But if the mere retention in the mouth of the smoke is so bad, how much more must it be so in the case of the foreigner who always "inhales" or swallows the smoke; and yet it is held in your article that the foreign way of smoking is the least injurious.

I do not know whether the attention of the medical profession has been drawn to the subject of "inhaling," but if it has, I and many other "outsiders" with whom I have conversed on the subject would be glad to know their opinion, whether inhaling is much more injurious than ordinary smoking, and what are its effects; and I think that it would be very useful to the public to have their views, as the practice of inhaling seems to be spreading rapidly.—I am, Sir, your obedient servant,

May 29th, 1883. C. E. D.

To the Editor of THE LANCET.

SIR,—I have read with interest your article in this day's LANCET, but I cannot reconcile the statements therein made with my experience. I am not writing controversially, but seeking to benefit by your professional knowledge. I am a great cigarette smoker, and keep one in my mouth almost continually from after breakfast until I extinguish my bedroom candle at night. The only ill-effect I experience, if this is caused by cigarette smoking, is that, on waking in the morning, I am apparently suffering from bronchitis—at least, what I call bronchitis—and it takes me a good half to three-quarters of an hour of violent coughing to get right. The rest of the day all goes smoothly. I have neither nausea nor want of appetite, and I fancy few men drink as little of any liquid as I do. I take no spirits, and my usual drink is a very mild table ale. But if I smoke two cigars consecutively or three in the twenty-four hours, I am quite upset—a bad taste in my mouth on waking, no inclination for food, and ever recurring giddiness, palpitations, &c. Furthermore, one pipe of bird's-eye tobacco, without any other smoking whatever, finishes me off without any delay. May I inquire if the "bronchitis" may be attributed to the cigarettes? I am, Sir, yours faithfully,

May 26th, 1883. MAJOR.

M. D.—1. The offices of the Society are at 53, Berners-street.—2. See THE LANCET of Feb. 24th last.

Dr. Park's paper will appear in an early number.

MONEY VALUE OF MEDICAL SERVICES.

To the Editor of THE LANCET.

SIR,—I enclose a letter received by my solicitors from Mr. J. P. Knight, General Manager of the London, Brighton, and South Coast Railway, "the sentiments" in which he wished conveyed to me, and which I wish to make public, as also the circumstances of the case.

On the 17th September, 1882, I was sent for by the station master at Clapham Junction to attend a passenger suffering from concussion of the brain at 7.30 P.M.; and again on Nov. 4th, 1882, I was called up by a porter, who brought to my house a passenger with a wound of the scalp, which I attended to at 12.45 A.M. I sent in my account several times, and received always unsatisfactory replies. At last I put the matter into my solicitors' hands, and they had to press for the amount, which was paid and enclosed letter handed to me.

My residence being near Clapham Junction, I am at all times liable to be called in on an emergency, and I am surprised that the letter from so wealthy a company as the London, Brighton, and South Coast Railway should imply a desire to display their "humanity" without taking into consideration the services of, or inconvenience which it gives, a medical man. This is not the first time they have acted in this manner. I need not make any further remark on their letter, as it speaks for itself, but it occurs to me that it cannot be amiss that those who use the London, Brighton, and South Coast Railway—and indeed the general public as well—should be aware how the company regards the services of a medical man. I am, Sir, yours faithfully,

J. BROWN, L.K.Q.C.P., &c.

Belmont Lodge, St. John's-hill, New Wandsworth,
May 29th, 1883.

"London, Brighton, and South Coast Railway,
"May 17th, 1883.

"Dear Sirs,—In reply to your letter of the 24th ult., I send you a voucher for two guineas, being the amount claimed by your client, Dr. Brown, of St. John's-hill, New Wandsworth, for professional attendance on a Mrs. S—— and Mr. D——, as per account rendered.

"I cannot, however, allow this matter to pass without strongly protesting against the action taken by Dr. Brown in this matter. It is quite possible we may be legally liable. Morally we certainly are not. In cases like the ones in question it is not the practice of medical men generally to saddle the company with the responsibility for their fees when simply, as an act of humanity, the company's servants have occasion to call in their services.

"Please convey these sentiments to Dr. Brown, and I trust we may never again have occasion to call in his aid.—Yours truly,

"J. P. KNIGHT.

"Messrs. Simpson and Palmer, 9, Three Crown-square,
"Southwark, S.E."

*** This is of a piece with the treatment of medical services by railway companies, boards, and the official public generally. Our correspondent did quite right to insist on payment. We heartily wish members of our profession were like spirited.—ED. L.

MIDWIFERY AND THE MEDICAL BILL.

A WRITER in the *Echo* shows with much force the loose state of the law as regards the practice of midwifery, and thinks the subject can be dealt with easily and effectually in the present Medical Bill. The Bill will secure that all medical men henceforth shall be examined in midwifery as in medicine and surgery, but it does not seem to us practicable to legislate on the subject of midwives and midwives' midwifery in this measure. It requires a separate Bill.

Subscriber.—Under certain conditions specified in the Bill, foreign degrees will be registrable. We do not see that holders of the degree mentioned will have to drop the title. Whether it will be registrable or not is another question, and depends on the estimate formed of it by the Medical Council and other conditions.

"WATER-TESTING IN THE COUNTRY."

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, "A Country Practitioner," I would suggest to him that a far more reliable and an exceedingly simple process of testing water exists in estimating the quantity of chlorine present in the suspected sample. The details of the process are described in Wanklyn's little work on "Water Analysis." The standard solution of nitrate of silver can be obtained from any analytical chemist, if the practitioner has not time to make it himself. The absence of chlorine, or the presence of only the normal amount (usually known in the case of public supplies), would at once enable him to pronounce the water free from sewage pollution. For instance, the amount of chlorine in the Ramsgate water-supply is small, and exactly the same amount has been found after repeated examinations during the space of three years, showing clearly that no contamination from sewage has occurred. The method is so simple and so quickly performed that a practitioner might easily examine several samples in a very short time.

I am, Sir, your obedient servant,
EDWARD WALFORD, S.Sc.C.Camb.,
May 29th, 1883. Medical Officer of Health, Ramsgate.

To the Editor of THE LANCET.

SIR,—It will, I am sure, be a great boon to many a busy country surgeon like myself to know of a simple, reliable test for drinking-water. As a rough test (but I fear a very unsatisfactory one) I sometimes add about a drachm of Nessler's fluid to an ounce of the water. In some samples of water, which have been condemned by professors of chemistry as "saturated with sewer matter and totally unfit for use," I found that this test immediately threw down a "very deep orange-coloured precipitate," whereas in pure spring water (pronounced by the same authorities as "perfect drinking-water") no such result occurred. Is one justified in condemning water by this rough-and-ready method alone? As one of the polluted waters mentioned comes, unfortunately, from my own pump, I should be glad to know about the cost of sinking an Abyssinian well in my field, some distance from the house, and the address of the company to apply to?—I am, Sir, yours truly,

May 29th, 1883. COUNTRY SURGEON.

Mr. S. E. Harron.—The suggestion is impracticable.

A Nursing Sister.—We are not aware.

SPONTANEOUS EVOLUTION.

To the Editor of THE LANCET.

SIR,—The following case is, I think, of sufficiently rare occurrence to merit some notice. When sent for I was out, and did not arrive at my patient's bedside until an hour or more after the message; and the nurse not having arrived, the gravity of the case was not recognised by the friends. On examination I found the hand and arm of a full grown foetus external to the vulva, the right shoulder presenting and well down into the pelvis (I may here mention that the liquor amnii had escaped some days previously); in fact, so low down was it and the uterine contractions so strong and continuous, that I found it quite impossible to introduce my hand into the uterus. At this stage I thought it advisable to get help, and I sent for Dr. Herman, but before he could get to my assistance I was rather surprised to find the side of the chest bulging out and presenting. Then came the breech, followed by the legs, and finally the head, and my patient was delivered of a well-developed foetus exactly as described by Denman. I may add that it was decomposed, and had therefore been dead some days, and had thus lost some of its resiliency, and was more easily doubled up. It weighed six pounds and a half, and was the third child.—I am, Sir, yours truly,

Bunhill-row, E.C., May 22nd, 1883. W. A. DINGLE.

THE TITLE OF "DOCTOR."

To the Editor of THE LANCET.

SIR,—By what authority does the Royal College of Physicians of Edinburgh address its licentiates by the title of "Doctor"? This morning two gentlemen of my acquaintance, both with the double of Edinburgh, but no other qualifications, received each a circular addressed to him as "Dr. So-and-so." Above the address is printed, "From the Royal College of Physicians of Edinburgh." The circular itself refers to the Medical Bill, bears the seal of the College, and is signed "In name and by authority of the College." It is a pity Edinburgh licentiates should be so encouraged to call themselves "Doctor" if they have no right to the title.

I am, Sir, yours truly,

May 28th, 1883. LEX.

EXAMINATIONS AT THE ROYAL COLLEGE OF SURGEONS.

AT the half-yearly primary or anatomical and physiological examination for the Fellowship of the Royal College of Surgeons, which was commenced on the 18th ult., the following were the questions on Physiology submitted to the eighty-six candidates, when they were required to answer at least three out of the four questions, from 9 A.M. to 12 noon:—

1. How is carbon dioxide eliminated from the body? What is the average daily quantity excreted? Explain how this may be affected by variations in temperature, quality of food, and amount of work performed.
2. Describe the capillary lymphatics, and the methods by which they can be demonstrated. How is the lymph-current maintained in man and other vertebrates?
3. Describe the structure of the canal of the cochlea. Explain how differences of sound are perceived.
4. Describe the sequence of events in the contraction of the heart's cavities. Give the average duration of the different parts of the rhythm. How may both these points be demonstrated? State the exact relation borne by the heart's sounds to the various phases of its action.

The following were the questions on Anatomy, to be answered from 1 to 4 o'clock the same day:—

1. The anterior wall of the abdomen having been removed, describe the dissection required to expose the lumbar arteries and their abdominal branches.
2. The body being placed on its back and the head turned to one side, describe the dissection required to expose the interval between the upper border of the superior constrictor of the pharynx and the base of the skull (sinus of Morgagni).
3. Describe the various inflections of the peritoneum, and trace their formation from early fœtal life to their complete development.
4. Explain the general plan of construction of the human skull. Give the typical component parts of each bone as displayed in the course of development and represented as permanent bones in the skulls of lower animals, and point out the features in man's skull which are essentially human.

F. B. will continue to be registered as at present. His status will be unaffected by the Bill.

Mr. W. Powell.—Skilful extraction is perhaps the best remedy.

Mr. S. Stretton.—David Challen, Mildmay-road.

"APOMORPHIA."

To the Editor of THE LANCET.

SIR,—My attention has just been directed to a note from Fred. W. Rees, of South Africa, in THE LANCET of March 31st, 1883, giving his experience with apomorphia on a dog which had swallowed a large quantity of morphine. I, too, have had a little experience with this drug, which might be of interest.

About a year ago I was called to a stout, healthy woman who had swallowed an unknown quantity of morphine with suicidal intent. She was already unconscious, pupils contracted, and stertorous breathing. As I could get her to swallow nothing, I injected into the arm, as soon as I could get it from a drug store about one square away, about one-eighth of a grain of apomorphia dissolved in water, which was followed in a few moments by copious vomiting. As the patient seemed to get no worse, nothing more was done, and she recovered in a few hours.

I have also used hypodermic injections of apomorphia in three cases of general clonic convulsions of children, all under four years of age. The convulsions in one were caused by commencing meningitis, in one by pneumonia, and in the third by intermittent fever. All recovered fully from the convulsions, but the one with meningitis died in about three weeks from the meningitis; the one with pneumonia lived one week, and died from the disease; and the other recovered in about two months, after a severe seizure of malarial fever, with possibly some meningitis, but is to-day almost an idiot, more than a year after recovery. All recovered perfect consciousness for about one week, showing that the apomorphia had nothing to do with death in two cases or with the idiocy of the third.

I am, Sir, very truly yours,
S. Illinois-street, Indianapolis, Indiana, U.S., F. JACKMAN, M.D.
May 15th, 1883.

Dr. Collier's letter arrived too late for consideration this week.

S. P.—We have no recollection of the paper named.

MEDICAL ETIQUETTE.

To the Editor of THE LANCET.

SIR,—Would you kindly say whether Dr. B acts the part of a gentleman in the following case?—

A was sent for to see a patient who had met with an accident. He was asked if he would have the assistance of B. Not objecting, B was sent for. A was requested by the patient to attend him as long as required. B continues to call daily at the patient's house "just as he is passing to pay a visit further on." I should add that neither A nor B is the patient's regular medical attendant, he being a stranger in the neighbourhood.

I am, Sir, yours truly,
May 23rd, 1883. K.

*** We think B should not call in the casual way described.—ED. L.

FUND FOR DR. BROWN.

MR. FREDERICK WALLACE asks us to announce the following subscriptions which he has received and forwarded to the Rev. E. E. Crake, Clifton House, Eastbourne, hon. sec. to the fund:—

N. Davies Colley, Esq.	..	£3	3	0	Dr. Colebrooke ..	£0	10 6
Dr. Adams, Croydon	..	2	2	0	Dr. Fairlie Clarke..	0	10 6
A mite	..	1	1	0			

Mr. A. Duff Morison.—The inquiries were instituted, not with a view to formal publication, but for our own information.

SUDDEN DEATH AND THE CORONER'S COURT.

To the Editor of THE LANCET.

SIR,—I happened to be called to a case of sudden death whilst taking charge of a practice in this neighbourhood. The deceased, who was a public man, was found by me lying dead in his bed, but how he came by his death there was no evidence to show. He had not been attended lately by the proprietor of this practice, but report said that he had been drinking rather heavily of late, and that several of his relatives had been the victims of deaths from unnatural causes. I duly informed the coroner for this district, who I understand is a legal gentleman. Though I do not wish to cast any reflections upon this functionary, as far as his knowledge of the law is concerned, I am yet bound to express my surprise at the following method of procedure. Last evening I was visited by the coroner's officer, and asked, amongst other questions, if I thought a post-mortem examination necessary? I replied, "Most certainly, for it would be impossible for the jury to be satisfied as to the cause of death without it." Being pretty sure that I should be requested to perform the post-mortem examination, I thought it advisable to ask the house-surgeon to the infirmary here to assist me, in order that every satisfaction might be given to the friends of the deceased. To my surprise, however, instead of receiving a notice from the coroner to examine the remains, his deputy (the officer) called on me the next day again, and warned me that an inquest would be held at a certain time and place, and requested my attendance. There was no formal summons, so I refused to attend without one, as thereby I could not claim my fee, as by law entitled. Being rather curious to know the result of this informal inquiry into the "cause of death," I called on a local chemist and upon the landlord of the public-house in which the inquest was held. I understand the "verdict" in this case was "Death from natural causes." The chemist (a juror) was asked his opinion as to the deceased being actually dead when he was called in. Until this period I was unaware he ever was "called in."

Now, in commenting on this case, there is certainly room for reflection as to whether the coroner has or has not exceeded his duty on behalf of the ratepayers; or, on the other hand, neglected his duty on behalf of the friends of the deceased.

I really think it is high time the public should be led to discriminate between a medico-legal and a purely legal coroner, and the sooner this is done the better for all parties concerned.

I am, Sir, yours faithfully,

Stockport, May 22nd, 1883. G. DE COURCY MORRIS, M.D., &c.

"IS TENDENCY TO DEATH DURING PARTURITION HEREDITARY?"

To the Editor of THE LANCET.

SIR,—In reply to Mr. W. Henry Day's request for further information on the above question, I may mention that last week, among the applicants for assurance at the office with which I am connected, was a gentleman whose mother and two sisters had died in childbed. The mother died at the age of thirty-three of childbirth, not certified; the two sisters at the age of twenty-six and twenty-seven, from peritonitis, after an illness of three and two days respectively.

I am, Sir, your obedient servant,

F. DE HAVILLAND HALL.

Queen Anne-street, Cavendish-square, W., May 28th, 1883.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Henry Thompson, London; Sir Charles Trevelyan, London; Dr. Prosser James, London; Dr. Barnes, London; Dr. Galabin, London; Dr. Gordon Holmes, London; Mr. Hazell, London; Mr. S. Clair Thompson, London; Dr. De H. Hall, London; Dr. Clement Dukes, Rugby; Mr. Macdonagh, London; Mr. Stonham, London; Dr. Alex. Duncan, Glasgow; Mr. Hamilton, Swadlincote; Mr. G. W. Parker; Dr. E. Cutter, New York; Dr. T. H. Green, London; Mr. J. Brown, St. John's-hill; Messrs. Maw, Son, and Thompson; Dr. S. West, London; Dr. Anningson, Cambridge; Mr. W. H. Brown, Leeds; Mr. Cooke, Scarborough; Dr. Collins, Nottingham; Surgeon-Major Cookson; Mr. Powell; Mr. Walsham, London; Dr. Herschell, London; Dr. Sisca, Naples; Mr. F. Mason, London; Mr. C. Mazzoni, London; Dr. Jackman, Indianapolis; Dr. Duffield, London; Dr. Bramwell, Edinburgh; Dr. Ashby, Manchester; Mr. W. C. F. Smith, Halifax; Mr. Harron; Mr. Phillips, Tickhill; Messrs. Norman and Co., London; Dr. Dougal, Nettlesworth; Mr. Knagge, Hadderafield; Mr. Waddell, Rotherhithe; Mr. Mudd, Storrington; Mr. Jacob, Leeds; Dr. Shore, Lewisham; Mr. Heaton, Milasbridge; Mr. Lillett, Cheltenham; Mr. Padden, Putney; Mr. Menzies, Glasgow; Mr. Gothard, Alcester; Dr. Hall, London; Messrs. Mather and Co., London; Messrs. Hawkes, Birmingham; Dr. E. M. Smith, London; Dr. Yeo, London; Mr. Fred. Pope, London; Mr. Macdonald, Crauford; Mr. Charles Hawkins, London; Mr. F. C. Mears, Tynemouth; Mr. Makuna; Mr. Hopkins; Mr. C. F. Gill; Dr. Appleton, Staines; Mr. H. T. Butlin, London; Surgeon-Major Don, London; Dr. Cullimore, London; Mr. Freeman, London; Dr. Macnaughton Jones, London; Mr. Hoskins, Duffield; Dr. Shingleton Smith; Mr. Hunt, Chertsey; Mr. Jeffery, Eastbourne; Messrs. Latimer and Glanville, Exeter; Dr. Collier, Great Yarmouth; Mr. Manson, Darlington; Dr. Alexander, Halifax; Mr. F. Wallace; Dr. Campbell Black, Glasgow; Mr. Wright, London; Mr. Croskery, Eckington; A. C. G.; A Student; The Judge Advocate General; A. H. M., Mile-end; T. H. M., Yarmouth; Fides, Leicester; E. H.; Beta; R. M.; Major; Subscriber; Country Surgeon; Hibernian; A Member of the Rational Dress Society; M.R.C.S., L.M., L.S.A.; A Country Doctor; G. E. S.; Junior Practitioner; T. L., Cambridge; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Breese, London; Mr. Davenport, London; Mr. Lewis, Dover; Mr. Armstrong, Manchester; Mr. Hodgson, St. Helens; Mr. French, Holmbrook; Mrs. Goring, Llanelly; Mr. Wallace, Hackney; Mr. Page, Newcastle; Mr. Edgill, Manchester; Dr. Powell, Peterchurch; Messrs. Crosby and Co., Southwark; Mr. G. Lawson, London; Mr. Rutter, Hammersmith; Mr. Jones, Camberwell; Mr. Warner, Woodford; Mr. Johnson, Sparkbrook; Mr. Moore, Tenterden; Mr. Saunders, Kentish-town; Mr. Bryan, London; Mr. Kerr, Plaistow; Mr. Tennant, Fence-houses; Mr. Magnus, London; Mr. Hewett, Over Darwin; Messrs. Smith and Son, Dublin; Mr. Jones, Hirwain; Mr. Nelson, Beverly; Dr. Hicks, Hendon; Mr. Logan, Newcastle-on-Tyne; Mr. Heygate, Wellingboro'; Messrs. Roberts and Co., London; Dr. Wharton, Oldham; Mr. Kinder, Leicester; Mr. Martindale, London; Mrs. Rahn, Ipswich; Mr. Elmslie, Shrewsbury; Mr. Gadfery, Whitechapel; Mr. Etches; Dr. Hartnett, Wandsworth; Dr. Stewart, Hadderafield; Mr. Smith, Doncaster; Dr. Wilson, Wen; Mr. Harrison, Sherburn; Dr. Hoelas, Hampstead; Mr. Lewis, Dover; Messrs. Crosby and Co., Salford; Crisis; Veritas; M.D., Oxford; M.D., New Normanton; Vendor; B. R., Taunton; X.; L. K.; Medicus, Holloway; L.R.C.P.; Fides; M.R.C.S., Alfreton; C. R. J.; P. M.; Alpha, Pontypool; C. C., New-cross; M.R.C.S.; Delta, Holloway; Principal, Seaford; C. M., Greenwich; Medicus, Croydon; J. F., Middlesboro'; G. B.; S. M. R., Croydon; &c., &c.

The Nation, Merthyr Express, Western Morning News, Morningside Mirror, Sunderland Herald, Scotsman, Bradford Observer, Manchester Guardian, Dover Standard, Guernsey Star, Stockport Advertiser, Live Stock Journal, Northern Whig, &c., have been received.

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